

ELEMENT WASHINGTON DC LLC

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PART 27 MEASUREMENT REPORT

Applicant Name:

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

Date of Testing:

09/12/2023 – 2/2/2024 **Test Report Issue Date:** 2/6/2024 **Test Site/Location:** Element lab., Columbia, MD, USA **Test Report Serial No.:** 1M2312110124-18.A3L

FCC ID:

A3LSMS928JPN

Applicant Name:

Samsung Electronics Co., Ltd.

Application Type: Model: Additional Model(s): EUT Type: FCC Classification: FCC Rule Part: Test Procedure(s):

Certification SC-52E SCG26 Portable Handset PCS Licensed Transmitter Held to Ear (PCE) 27 ANSI C63.26-2015, KDB 648474 D03 v01r04

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.

RJ Ortanez Executive Vice President



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Antenna-1						
				El	RP	
Mode	Bandwidth	Modulation	Tx Frequency Range [MHz]	Max. Power [W]	Max. Power [dBm]	Emission Designator
	20 MHz	QPSK	2506.0 - 2680.0	0.248	23.95	18M0G7D
	20 10112	16QAM	2506.0 - 2680.0	0.202	23.05	18M0W7D
	15 MHz	QPSK	2503.5 - 2682.5	0.237	23.75	13M5G7D
LTE Bood 41 (DC2)		16QAM	2503.5 - 2682.5	0.209	23.19	13M5W7D
LTE Band 41 (PC3)		QPSK	2501.0 - 2685.0	0.241	23.81	9M08G7D
	10 MHz	16QAM	2501.0 - 2685.0	0.188	22.74	Designator 18M0G7D 18M0W7D 13M5G7D 13M5W7D
	5 MHz	QPSK	2498.5 - 2687.5	0.244	23.88	4M50G7D
	o ivi⊓z	16QAM	2498.5 - 2687.5	0.193	22.85	4M53W7D

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Antenna-1						
					RP	
Mode	Bandwidth	Modulation	Tx Frequency Range [MHz]	Max. Power [W]	Max. Power [dBm]	Emission Designator
		π/2 BPSK	2546.0 - 2640.0	0.155	21.89	96M9G7D
	100 MHz	QPSK	2546.0 - 2640.0	0.159	22.01	97M7G7D
		16QAM	2546.0 - 2640.0	0.100	20.01	Designator 96M9G7D
		π/2 BPSK	2541.0 - 2645.0	0.150	21.76	87M2G7D
	90 MHz	QPSK	2541.0 - 2645.0	0.156	21.93	87M7G7D
		16QAM	2541.0 - 2645.0	0.108	20.35	87M6W7D
		π/2 BPSK	2536.0 - 2650.0	0.155	21.89	77M3G7D
	80 MHz	QPSK	2536.0 - 2650.0	0.153	21.84	77M4G7D
		16QAM	2536.0 - 2650.0	0.100	20.02	77M5W7D
		π/2 BPSK	2531.0 - 2655.0	0.155	21.92	64M3G7D
	70 MHz	QPSK	2531.0 - 2655.0	0.143	21.55	67M6G7D
		16QAM	2531.0 - 2655.0	0.112	20.48	67M5W7D
		π/2 BPSK	2526.0 - 2660.0	0.156	21.93	57M9G7D
	60 MHz	QPSK	2526.0 - 2660.0	0.157	21.97	58M0G7D
		16QAM	2526.0 - 2660.0	0.107	20.27	58M0W7D
		π/2 BPSK	2521.0 - 2665.0	0.164	22.14	45M9G7D
	50 MHz	QPSK	2521.0 - 2665.0	0.184	22.65	47M7G7D
		16QAM	2521.0 - 2665.0	0.101	20.04	47M7W7D
NR Band n41(PC3)	40 MHz	π/2 BPSK	2516.0 - 2670.0	0.170	22.32	35M9G7D
		QPSK	2516.0 - 2670.0	0.149	21.72	38M0G7D
		16QAM	2516.0 - 2670.0	0.103	20.12	Designator 96M9G7D 97M7G7D 97M8W7D 87M2G7D 87M7G7D 87M6W7D 87M6W7D 87M6W7D 77M3G7D 77M4G7D 77M5W7D 64M3G7D 67M6G7D 57M9G7D 58M0G7D 58M0G7D 45M9G7D 45M9G7D 38M0G7D 38M0G7D 28M0G7D 28M0G7D 28M0G7D 28M0W7D 28M0W7D 28M0W7D 23M3W7D 23M3W7D 18M0G7D 18M4W7D 13M7W7D 13M7W7D 8M71G7D 8M71G7D 8M71G7D 8M71G7D
		π/2 BPSK	2511.0 - 2675.0	0.161	22.07	27M0G7D
	30 MHz	QPSK	2511.0 - 2675.0	0.171	22.34	28M0G7D
		16QAM	2511.0 - 2675.0	0.103	20.13	28M0W7D
		π/2 BPSK	2508.1 - 2677.5	0.142	21.51	23M1W7D
	25 MHz	QPSK	2508.1 - 2677.5	0.146	21.63	23M3W7D
		16QAM	2508.1 - 2677.5	0.100	20.01	23M3W7D
		π/2 BPSK	2506.0 - 2680.0	0.148	21.70	18M0G7D
	20 MHz	QPSK	2506.0 - 2680.0	0.143	21.54	
		16QAM	2506.0 - 2680.0	0.080	19.05	35M9G7D 38M0G7D 38M0W7D 27M0G7D 28M0G7D 28M0W7D 28M0W7D 23M1W7D 23M3W7D 23M3W7D 18M0G7D 18M3G7D
		π/2 BPSK	2503.5 - 2682.48	0.158	22.00	
	15 MHz	QPSK	2503.5 - 2682.48	0.177	22.48	
		16QAM	2503.5 - 2682.48	0.098	19.92	
		π/2 BPSK	2501.0 - 2685.0	0.188	22.74	
	10 MHz	QPSK	2506.0 - 2680.0	0.179	22.52	
		16QAM	2506.0 - 2680.0	0.111	20.45	

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Antenna-2							
				El			
Mode	Bandwidth	ndwidth Modulation Tx Frequency Range [MHz]	Max. Power [W]	Max. Power [dBm]	Emission Designator		
	20 MHz	QPSK	2506.0 - 2680.0	0.230	23.61	18M0G7D	
	20 1011 12	16QAM	2506.0 - 2680.0	0.173	22.38	18M1W7D	
	15 MHz	QPSK	2503.5 - 2682.5	0.247	23.92	13M5G7D	
LTE Band 41 (PC3)		16QAM	2503.5 - 2682.5	0.176	22.45	13M5G7D 13M5W7D	
		QPSK	2501.0 - 2685.0	0.235	23.70	9M00G7D	
	10 MHz	16QAM	2501.0 - 2685.0	0.165	22.18	Designator 18M0G7D 18M1W7D 13M5G7D 13M5W7D	
	5 MHz	QPSK	2498.5 - 2687.5	0.216	23.34	4M53G7D	
	5 IVI⊟Z	16QAM	2498.5 - 2687.5	0.202	23.05	4M50W7D	

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		Ante	nna-2			
				EI	RP	
Mode	Bandwidth	Range [MHz]		Max. Power [W]	Max. Power [dBm]	Emission Designator
		π/2 BPSK	2546.0 - 2640.0	0.220	23.42	97M0G7D
	100 MHz	QPSK	2546.0 - 2640.0	0.206	23.13	97M7G7D
		16QAM	2546.0 - 2640.0	0.139	21.42	97M8W7D
		π/2 BPSK	2541.0 - 2645.0	0.231	23.64	87M1G7D
	90 MHz	QPSK	2541.0 - 2645.0	0.206	23.14	87M7G7D
		16QAM	2541.0 - 2645.0	0.153	21.85	Designator 97M0G7D 97M7G7D 97M8W7D 87M1G7D 87M7G7D 87M7G7D 87M7G7D 87M7G7D 77M2G7D 77M607D 77M607D 64M3G7D 67M7G7D 67M7G7D 58M0G7D 57M9W7D 45M8G7D 47M6G7D 38M0G7D 38M0G7D 28M0G7D 28M0G7D 28M0G7D 28M0G7D 28M0W7D 28M0W7D 23M4W7D 23M4W7D 18M0G7D
		π/2 BPSK	2536.0 - 2650.0	0.226	23.54	77M2G7D
	80 MHz	QPSK	2536.0 - 2650.0	0.200	23.01	77M6G7D
		16QAM	2536.0 - 2650.0	0.159	22.02	77M6W7D
		π/2 BPSK	2531.0 - 2655.0	0.224	23.50	64M3G7D
	70 MHz	QPSK	2531.0 - 2655.0	0.206	23.14	67M7G7D
		16QAM	2531.0 - 2655.0	0.159	22.01	67M5W7D
		π/2 BPSK	2526.0 - 2660.0	0.205	23.12	58M0G7D
	60 MHz	QPSK	2526.0 - 2660.0	0.208	23.18	58M0G7D
		16QAM	2526.0 - 2660.0	0.126	21.02	57M9W7D
		π/2 BPSK	2521.0 - 2665.0	0.245	23.90	45M8G7D
	50 MHz	QPSK	2521.0 - 2665.0	0.237	23.74	47M6G7D
		16QAM	2521.0 - 2665.0	0.135	21.29	47M7W7D
NR Band n41(PC3)		π/2 BPSK	2516.0 - 2670.0	0.216	23.34	36M0G7D
	40 MHz	QPSK	2516.0 - 2670.0	0.226	23.54	38M0G7D
		16QAM	2516.0 - 2670.0	0.135	21.30	38M0G7D
		π/2 BPSK	2511.0 - 2675.0	0.224	23.50	27M0G7D
	30 MHz	QPSK	2511.0 - 2675.0	0.269	24.30	28M0G7D
		16QAM	2511.0 - 2675.0	0.114	20.58	
		π/2 BPSK	2508.1 - 2677.5	0.211	23.24	23M0W7D
	25 MHz	QPSK	2508.1 - 2677.5	0.189	22.77	23M4W7D
		16QAM	2508.1 - 2677.5	0.143	21.55	
		π/2 BPSK	2506.0 - 2680.0	0.217	23.36	-
	20 MHz	QPSK	2506.0 - 2680.0	0.200	23.01	18M4G7D
		16QAM	2506.0 - 2680.0	0.152	21.83	18M3W7D
		π/2 BPSK	2503.5 - 2682.5	0.222	23.47	13M0G7D
	15 MHz	QPSK	2503.5 - 2682.5	0.187	22.71	13M6G7D
		16QAM	2503.5 - 2682.5	0.187	22.71	13M7G7D
				-		
		π/2 BPSK	2501.0 - 2685.0	0.234	23.69	8M62G7D
	10 MHz	QPSK	2506.0 - 2680.0	0.196	22.92	8M65G7D
		16QAM	2506.0 - 2680.0	0.126	21.02	8M62W7D

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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

These measurement tests were conducted at the Element laboratory located at 7185 Oakland Mills Road, Columbia, MD 21046. The measurement facility is compliant with the test site requirements specified in ANSI C63.4-2014.

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 Agreement.

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2.0 PRODUCT INFORMATION

2.1 Equipment Description

The Equipment Under Test (EUT) is the **Samsung Portable Handset FCC ID: A3LSMS928JPN**. 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.: 1719M, 1728M

2.2 Device Capabilities

This device contains the following capabilities:

850/1900 GSM/GPRS/EDGE, 850/1700/1900 WCDMA/HSPA, Multi-band LTE, Multi-band 5G NR (FR1), 802.11b/g/n/ax WLAN, 802.11a/n/ac/ax UNII (5GHz and 6GHz), Bluetooth (1x, EDR, LE), NFC, Wireless Power Transfer, UWB

This device uses a tuner circuit that dynamically updates the antenna impedance parameters to optimize antenna performance for certain bands and modes of operation. The tuner for this device was set to simulate a "free space" condition where the transmit antenna is matched to the medium into which it is transmitting and, thus, the power is at its maximum level.

Band	Ant 1	Ant 2		
LTE B41 (PC3)	Ant B	Ant F		
n41 (PC3)	Ant F	Ant B		
Table 2-1 Antenna Naming Convention				

 Table 2-1. Antenna Naming Convention

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.

This device supports wireless charging capability and, thus, is subject to the test requirements of KDB 648474 D03 v01r04. Additional radiated spurious emission measurements were performed with the EUT lying flat on an authorized wireless charging pad (WCP) Model: 0 while operating under normal conditions in a simulated call or data transmission configuration. The worst case radiated emissions data is shown in this report.

2.4 Software and Firmware

Testing was performed on device(s) using software/firmware version K758OMU0AWLH installed on the EUT.

2.5 EMI Suppression Device(s)/Modifications

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

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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 power measurements, substitution method is used per the guidance of ANSI C63.26-2015. For emissions below 1GHz, a half-wave dipole is substituted in place of the EUT. For emissions above 1GHz, a horn antenna is substituted in place of the EUT. The substitute antenna is driven by a signal generator with the level of the signal generator being adjusted to obtain the same receive spectrum analyzer level previously recorded from the spurious emission from the EUT. The power of the emission is calculated using the following formula:

 $P_{d [dBm]} = P_{g [dBm]} - cable loss [dB] + antenna gain [dBd/dBi];$

where P_d is the dipole equivalent power, P_g is the generator output into the substitution antenna, and the antenna gain is the gain of the substitute antenna used relative to either a half-wave dipole (dBd) or an isotropic source (dBi). The substitute level is equal to P_g [dBm] – cable loss [dB].

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:

$$\begin{split} E_{[dB\mu V/m]} &= Measured \ amplitude \ level_{[dBm]} + 107 + Cable \ Loss_{[dB]} + Antenna \ Factor_{[dB/m]} \\ And \\ EIRP_{[dBm]} &= E_{[dB\mu V/m]} + 20logD - 104.8; \ where \ D \ is the measurement \ distance \ in \ meters. \end{split}$$

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

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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

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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
-	AP2-001	EMC Cable and Switch System	1/11/2023	Annual	1/11/2024	AP2-001
-	AP2-002	EMC Cable and Switch System	1/11/2023	Annual	1/11/2024	AP2-002
-	ETS-001	EMC Cable and Switch System	1/11/2023	Annual	1/11/2024	ETS-001
-	ETS-002	EMC Cable and Switch System	1/11/2023	Annual	1/11/2024	ETS-002
-	LTX4	Licensed Transmitter Cable Set	1/12/2023	Annual	1/12/2024	LTX4
-	LTX5	Licensed Transmitter Cable Set	1/12/2023	Annual	1/12/2024	LTX5
Anritsu	MT8821C	Radio Communication Analyzer		N/A		620152694
Com-Power	AL-130R	9kHz - 30MHz Loop Antenna	1/18/2022	Biennial	1/19/2024	121085
EMCO	3115	Horn Antenna (1-18GHz)	8/8/2022	Biennial	8/8/2024	9704-5182
EMCO	3116	Horn Antenna (18-40GHz)	7/5/2023	Biennial	7/5/2025	9203-2178
Keysight Technologies	N9030A	PXA Signal Analyzer (3Hz-26.5GHz)	8/7/2023	Annual	8/7/2024	MY54490576
Keysight Technologies	N9030A	PXA Signal Analyzer (44GHz)	3/15/2023	3/15/2023 Annual 3/15/2024		MY52350166
Rohde & Schwarz	CMW500	Radio Communication Tester		N/A		112347
Rohde & Schwarz	TC-TA18	Cross Polarized Vivaldi Test Antenna	9/28/2022	Biennial	9/28/2024	101058
Rohde & Schwarz	ESU26	EMI Test Receiver (26.5GHz)	9/25/2023	Annual	9/25/2024	100342
Rohde & Schwarz	ESW44	EMI Test Receiver (2Hz-44GHz)	3/1/2023	Annual	3/1/2024	101716
Rohde & Schwarz	VULB9162	Bi-Log Antenna 2/21/2023 Biennial 2/21/2025		00301		
Sunol	DRH-118	Horn Antenna (1-18GHz)	2/14/2022			A050307
Sunol	JB5	Bi-Log Antenna (30M - 5GHz)	8/30/2022	Biennial	8/30/2024	A051107

Table 5-1. 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. Equipment with a calibration date of "N/A" shown in this list was not used to make direct calibrated measurements.

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6.0 SAMPLE CALCULATIONS

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

Spurious Radiated Emission

Example: Spurious emission at 3700.40 MHz

The receive spectrum analyzer reading at 3 meters with the EUT on the turntable was -81.0 dBm. The gain of the substituted antenna is 8.1 dBi. The signal generator connected to the substituted antenna terminals is adjusted to produce a reading of -81.0 dBm on the spectrum analyzer. The loss of the cable between the signal generator and the terminals of the substituted antenna is 2.0 dB at 3700.40 MHz. So 6.1 dB is added to the signal generator reading of -30.9 dBm yielding -24.80 dBm. The fundamental EIRP was 25.50 dBm so this harmonic was 25.50 dBm -(-24.80) = 50.3 dBc.

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7.0 TEST RESULTS

7.1 Summary

Company Name:	Samsung Electronics Co., Ltd.
FCC ID:	A3LSMS928JPN
FCC Classification:	PCS Licensed Transmitter Held to Ear (PCE)
Mode(s):	LTE/NR/ULCA

Test Condition	Test Description	FCC Part Section(s)	Test Limit	Test Result	Reference
	Transmitter Conducted Output Power*	2.1046(a), 2.1046(c)	N/A	PASS	Section 7.2
CONDUCTED	Occupied Bandwidth	2.1049(h)	N/A	PASS	Section 7.3
CONDI	Conducted Band Edge / Spurious Emissions (LTE Band 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		Fundamental emissions stay within authorized frequency block	PASS	Section 7.8
RADIATED	Equivalent Isotropic Radiated Power (LTE Band 41; NR Band n41)	27.50(h)(2)	≤ 2 Watts max. EIRP	PASS	Section 7.6
RADI	Radiated Spurious Emissions (LTE Band 41; NR Band n41)	2 1053 27 53(m)	Undesirable emissions must meet the limits detailed in 27.53(m)	PASS	Section 7.7

* The only transmitter output conducted powers included in this report are those where the Pmax value, per the tune-up document, is higher than any of the DSI power levels. For the remaining conducted power measurements, see the **RF Exposure Report**.

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.
- 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 v1.2.2.

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7.2 Conducted Output Power Data

Test Overview

All emissions are measured with a spectrum analyzer 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 Procedure Used

ANSI C63.26-2015 – Section 5.2

Test Settings

- 1. Span = $2 \times OBW$ to $3 \times OBW$
- 2. Detector = RMS
- 3. Trace mode = trace average for continuous emissions, max hold for pulse emissions
- 4. Sweep time = auto couple
- 5. The trace was allowed to stabilize
- 6. Please see test notes below for RBW and VBW settings

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. All other conducted power measurements are contained in the RF exposure report for this filing.
- 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.

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	Bandwidth				PCC			scc					A-MPR	
Band	(PCC + SCC)	Test Case	UL Channel	UL Frequency	Modulation	UL # RB	UL RB Offset	UL Channel	UL Frequency	Modulation	UL # RB	UL RB Offset	Measured Power [dBm]	
					QPSK	100	0	39948		QPSK	100	0	20.48	
		1	39750	2506.0	16-QAM	100	0		948 2525.8	16-QAM	100	0	19.53	
		1	39750	2506.0	64-QAM	100	0	59946		64-QAM	100	0	19.45	
					256-QAM	100	0			256-QAM	100	0	18.59	
					QPSK	1	99			QPSK	1	0	22.75	
		2	39750	2506.0	16-QAM	1	99	39948	2525.8	16-QAM	1	0	22.26	
		2	39730	2506.0	64-QAM	1	99	33348	2323.8	64-QAM	1	0	21.51	
					256-QAM	1	99			256-QAM	1	0	18.56	
		iz + 20MHz 4 3979				QPSK	100	0		Í	QPSK	100	0	20.05
			20700	790 2510.0	16-QAM	100	0	39988	2529.8	16-QAM	100	0	19.13	
					64-QAM	100	0		2325.8	64-QAM	100	0	19.13	
LTE B41 (PC3)	20MHz + 20MHz				256-QAM	100	0			256-QAM	100	0	18.15	
LIL D41 (1 C3)	20141112 - 20141112				QPSK	1	99	39988	2529.8	QPSK	1	0	22.44	
			20700	2510.0	16-QAM	1	99			16-QAM	1	0	21.92	
			59790	2510.0	64-QAM	1	99			64-QAM	1	0	21.12	
					256-QAM	1	99			256-QAM	1	0	18.22	
					QPSK	100	0			QPSK	100	0	20.18	
		5	39989	2529.9	16-QAM	100	0	40187	2549.7	16-QAM	100	0	19.23	
		5 3998	33365	2525.5	64-QAM	100	0	40107	2549.7	64-QAM	100	0	19.22	
					256-QAM	100	0			256-QAM	100	0	18.23	
					QPSK	1	99	1		QPSK	1	0	22.54	
		6 39989	39989	9989 2529.9	16-QAM	1	99	40187	40187 2549.7	16-QAM	1	0	22.02	
		5	55505	2020.0	64-QAM	1	99	.010/	23 15.7	64-QAM	1	0	21.23	
						256-QAM	1	99			256-QAM	1	0	18.22

Table 7-1. A-MPR Conducted Power Data (LTE Band 41(PC3) ULCA – Ant1)

	Bandwidth				PCC					SCC			A-MPR												
Band	(PCC + SCC)	Test Case	UL Channel	UL Frequency	Modulation	UL # RB	UL RB Offset	UL Channel	UL Frequency	Modulation	UL # RB	UL RB Offset	Measured Power [dBm]												
					QPSK	100	0			QPSK	100	0	20.66												
		1	39750	2506.0	16-QAM	100	0	39948	2525.8	16-QAM	100	0	19.69												
		1	39750	2506.0	64-QAM	100	0	59946	2525.6	64-QAM	100	0	19.68												
					256-QAM	100	0			256-QAM	100	0	18.68												
					QPSK	1	99			QPSK	1	0	22.83												
		2	39750	2506.0	16-QAM	1	99	39948	2525.8	16-QAM	1	0	22.41												
		2	39730	2506.0	64-QAM	1	99	59946	2323.8	64-QAM	1	0	21.65												
									256-QAM	1	99			256-QAM	1	0	18.63								
							QPSK	100	0			QPSK	100	0	20.64										
		0MHz	20700	39790 2510.0 39790 2510.0	16-QAM	100	0	39988	2529.8	16-QAM	100	0	19.75												
			39790		64-QAM	100	0		2325.8	64-QAM	100	0	19.74												
LTE B41 (PC3)	20MHz + 20MHz				256-QAM	100	0			256-QAM	100	0	18.75												
LIL D41 (1 C3)	20141112 - 20141112				QPSK	1	99	39988		QPSK	1	0	23.06												
			20700		16-QAM	1	99		2529.8	16-QAM	1	0	22.45												
			39790		64-QAM	1	99	33388		64-QAM	1	0	21.73												
					256-QAM	1	99			256-QAM	1	0	18.73												
					QPSK	100	0			QPSK	100	0	20.62												
		5	39989	2529.9	16-QAM	100	0	40187	2549.7	16-QAM	100	0	19.77												
		5	35505	2525.5	64-QAM	100	0	40107	2545.7	64-QAM	100	0	19.74												
					256-QAM	100	0			256-QAM	100	0	18.78												
					QPSK	1	99			QPSK	1	0	23.04												
		6	39989	2529.9	16-QAM	1	99	40187	2549.7	16-QAM	1	0	22.59												
		5	35385	2323.5	64-QAM	1	99	40187	25+5.7	64-QAM	1	0	20.95												
																	256-QAM	1	99			256-QAM	1	0	18.74

Table 7-2. A-MPR Conducted Power Data (LTE Band 41(PC3) ULCA – Ant2)

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Bandwidth	Modulation	Channel	Frequency [MHz]	RB Size/Offset	Conducted Power [dBm]
N		39750	2506.0	1 / 99	24.38
H	QPSK	40620	2593.0	1 / 50	23.56
20 MHz		41490	2680.0	1 / 99	23.92
7	16-QAM	39750	2506.0	1 / 99	19.18
N	QPSK	39725	2503.5	1 / 74	24.68
MHz		40620	2593.0	1 / 37	23.32
15 1		41515	2682.5	1 / 74	23.89
	16-QAM	41515	2682.5	1 / 74	20.96
N		39700	2501.0	1 / 49	24.47
MHz	QPSK	40620	2593.0	1 / 49	23.25
101		41540	2685.0	1 / 49	23.86
	16-QAM	41540	2685.0	1 / 49	20.70
N		39675	2498.5	1 / 24	23.84
MHz	QPSK	40620	2593.0	1 / 24	23.84
5 S		41565	2687.5	1 / 24	23.51
Q	16-QAM	41565	2687.5	1 / 24	21.56

Table 7-2. Conducted Power Data (LTE Band 41 (PC3) – Ant2)

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Bandwidth	Modulation	Channel	Frequency [MHz]	RB Size/Offset	Conducted Power [dBm]
	TT/2 BPSK	509202 518598	2546.01 2592.99	1 / 136 1 / 136	23.83 24.17
100 MHz	11/2 DFOR	528000	2640.00	1 / 136	23.97
		509202	2546.01	1 / 136	23.62
	QPSK	518598	2592.99	1 / 136	23.95
		528000	2640.00	1 / 136	23.83
	16-QAM	528000	2640.00	1 / 136	22.53
	π/2 BPSK	508200 518598	2541.00 2592.99	1 / 122	23.57 23.93
N	TT/2 BPSK	518598	2592.99 2644.98	1 / 122	23.93
2HM 06		508200	2541.00	1 / 122	23.47
6	QPSK	518598	2592.99	1 / 122	23.78
		528996	2644.98	1 / 122	23.75
	16-QAM	528996	2644.98	1 / 122	22.87
		507204	2536.02	1 / 108	23.67
N	π/2 BPSK	518598	2592.99	1 / 108	23.84
80 MHz		529998	2649.99	1/215	23.97
0	OPSK	507204 518598	2536.02 2592.99	1 / 108 1 / 108	23.64 23.91
œ	QF 3K	529998	2649.99	1/215	23.65
	16-QAM	529998	2649.99	1/215	22.53
		506202	2531.01	1 / 187	23.79
	π/2 BPSK	518598	2592.99	1 / 94	23.98
£		531000	2655.00	1 / 94	23.99
70 MHz		506202	2531.01	1 / 187	23.76
×	QPSK	518598	2592.99	1/94	23.45
	16 0414	531000	2655.00	1/94	23.37
	16-QAM	531000 505200	2655.00		23.00
	π/2 BPSK	505200	2526.00 2592.99	1 / 160 1 / 1	23.72 23.93
보	III DI OK	531996	2659.98	1/1	23.93
60 MHz		505200	2526.00	1 / 160	23.72
60	QPSK	518598	2592.99	1/1	23.59
		531996	2659.98	1/1	23.79
	16-QAM	518598	2592.99	1/1	22.94
		504204	2521.02	1 / 66	23.93
N	π/2 BPSK	518598	2592.99	1 / 66	24.38
50 MHz		532998 504204	2664.99	1 / 66 1 / 66	24.22 23.87
0	QPSK	518598	2521.02 2592.99	1/00	23.68
2	QF 3K	532998	2664.99	1/66	23.00
	16-QAM	532998	2664.99	1 / 66	22.56
		503202	2516.01	1 / 104	23.66
	π/2 BPSK	518598	2592.99	1 / 104	24.35
Ŧ		534000	2670.00	1 / 104	24.39
40 MHz		503202	2516.01	1 / 104	24.17
4	QPSK	518598 534000	2592.99	1 / 104 1 / 104	24.67
	16-QAM	518598	2670.00 2592.99	1 / 104	23.35 22.79
	10 00 111	502200	2511.00	1/1	23.75
	π/2 BPSK	518598	2592.99	1/1	24.25
£		534996	2674.98	1/1	24.15
30 MHz		502200	2511.00	1/1	24.41
я	QPSK	518598	2592.99	1/1	23.51
	16 0414	534996	2674.98	1/1	24.16
	16-QAM	518598 501702	2592.99 2508.51	1/1	22.79 23.41
	π/2 BPSK	518598	2508.51	1/1	23.41
₽	III DI OK	535500	2677.50	1/39	23.59
25 MH2		501702	2508.51	1/1	23.42
25	QPSK	518598	2592.99	1 / 39	23.74
		535500	2677.50	1 / 39	23.45
	16-QAM	518598	2592.99	1 / 39	22.67
	10.5-5-1	501204	2506.02	1/1	23.79
N	π/2 BPSK	518598	2592.99	1/1	24.71
20 MHz		535998 501204	2679.99 2506.02	1/1	23.77 23.04
8	QPSK	518598	2592.99	1/1	23.04
		535998	2679.99	1/1	23.36
	16-QAM	535998	2679.99	1/1	21.57
		500700	2503.50	1/1	24.02
	π/2 BPSK	518598	2592.99	1/1	24.64
Ĩ.		536496	2682.48	1/36	24.08
15 MHz	00011	500700	2503.50	1/1	24.02
≥	QPSK	518598 536496	2592.99 2682.48	1/1	23.31 24.30
15 N			2682.48	1 / 36 1 / 36	24.30
15 N	16-OAM			1/30	22.44
15 N	16-QAM	536496 500202	2501.01		
15 M		500202	2501.01 2592.99		24.19
	16-QAM π/2 BPSK		2501.01 2592.99 2685.00	1/1 1/12	24.19 24.82
		500202 518598	2592.99	1/1	
10 MHz 15 N		500202 518598 537000	2592.99 2685.00	1/1 1/12	24.82
	π/2 BPSK	500202 518598 537000 500202	2592.99 2685.00 2501.01	1/1 1/12 1/12	24.82 23.62

Table 7-3. Conducted Power Data (NR Band n41 – Ant1)

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Bandwidth	Modulation	Channel	Frequency [MHz]	RB Size/Offset	Conducted Power [dBm]
		509202	2546.01	1 / 136	23.79
N	π/2 BPSK	518598	2592.99	1/1	23.76
Η		528000	2640.00	1 / 136	23.50
100 MHz	0001/	509202	2546.01	1 / 136	23.68
10	QPSK	518598	2592.99	1/1	23.52
	40.0414	528000	2640.00	1 / 136	23.57
	16-QAM	528000 508200	2640.00 2541.00	1 / 136 1 / 122	22.14 23.72
	π/2 BPSK	518598	2592.99	1/122	23.64
90 MHz	III/2 BI OIL	528996	2644.98	1 / 122	23.72
		508200	2541.00	1 / 122	23.92
06	QPSK	518598	2592.99	1/122	23.73
0		528996	2644.98	1 / 122	23.58
	16-QAM	508200	2541.00	1 / 122	22.76
		507204	2536.02	1 / 108	23.78
	π/2 BPSK	518598	2592.99	1/1	23.96
¥		529998	2649.99	1/1	23.61
80 MHz		507204	2536.02	1 / 108	24.07
80	QPSK	518598	2592.99	1/1	23.62
		529998	2649.99	1/1	23.27
	16-QAM	507204	2536.02	1 / 108	22.93
	10.5-5-1	506202	2531.01	1/94	23.86
N	π/2 BPSK	518598	2592.99	1/1	23.57
70 MHz		531000	2655.00	1 / 187	23.57
20	QPSK	506202 518598	2531.01 2592.99	1/94	24.20 23.81
~	ursk	518598 531000	2592.99 2655.00	1/1	23.81
	16-QAM	531000	2655.00	1 / 187 1 / 187	23.43
	10-02/101	505200	2526.00	1 / 160	23.92
	π/2 BPSK	518598	2592.99	1 / 81	23.32
₽		531996	2659.98	1 / 160	23.20
60 MHz		505200	2526.00	1 / 160	23.99
60	QPSK	518598	2592.99	1 / 81	22.92
		531996	2659.98	1 / 160	23.61
	16-QAM	531996	2659.98	1 / 160	21.73
		504204	2521.02	1 / 131	24.04
	π/2 BPSK	518598	2592.99	1/1	23.92
50 MHz		532998	2664.99	1 / 66	23.97
2	0.000	504204	2521.02	1 / 131	23.55
20	QPSK	518598	2592.99	1/1	23.79
	46.0444	532998	2664.99	1/66	24.18
	16-QAM	532998	2664.99	1/66	22.00
	π/2 BPSK	503202 518598	2516.01 2592.99	1/1	24.03 23.98
N	II/2 DP3N	534000	2592.99	1 / 53	23.96
40 MHz		503202	2516.01	1/1	23.49
40	QPSK	518598	2592.99	1/1	23.81
		534000	2670.00	1 / 53	23.98
	16-QAM	534000	2670.00	1 / 53	22.01
		502200	2511.00	1/1	24.13
	π/2 BPSK	518598	2592.99	1/1	23.35
¥		534996	2674.98	1 / 39	23.57
30 MHz		502200	2511.00	1/1	23.42
30	QPSK	518598	2592.99	1/1	23.26
		534996	2674.98	1/39	24.74
	16-QAM	534996	2674.98	1/39	21.29
	#/2 DDO//	501702	2508.51	1/39	23.51
N	π/2 BPSK	518598	2592.99	1 / 1 1 / 39	23.27
Ŧ.		535500 501702	2677.50	1/39	23.32
25 MHz	QPSK	501702 518598	2508.51 2592.99	1/39	23.43
N	ur'an	535500	2592.99 2677.50	1/1	23.24 23.21
	16-QAM	535500	2677.50	1/39	23.21
	10 30 101	501204	2506.02	1/39	24.17
	π/2 BPSK	518598	2592.99	1/1	23.88
¥		535998	2679.99	1/1	23.43
20 MHz		501204	2506.02	1 / 39	23.21
20	QPSK	518598	2592.99	1/1	23.79
		535998	2679.99	1/1	23.45
	16-QAM	535998	2679.99	1/1	22.54
		500700	2503.50	1 / 39	23.57
	π/2 BPSK	518598	2592.99	1 / 39	23.67
Ŧ		536496	2682.48	1 / 76	23.55
15 MHz		500700	2503.50	1 / 39	23.12
÷	QPSK	518598	2592.99	1/39	22.94
	40.0111	536496	2682.48	1 / 76	23.15
	16-QAM	536496	2682.48	1/76	22.24
		500202	2501.01	1/1	23.70
N	π/2 BPSK	518598 537000	2592.99	1/1	23.50
Ŧ		537000	2685.00 2501.01	1/1	23.77 23.91
10 MHz	QPSK	518598	2592.99	1/1	23.91
2			2002.00		
9	QP3N		2685.00	1/1	23.25
10	16-QAM	537000 537000	2685.00 2685.00	1/1 1/1	23.25 21.73

Table 7-4. Conducted Power Data (NR Band n41 – Ant2)

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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 \geq 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.

FCC ID: A3LSMS928JPN		PART 27 MEASUREMENT REPORT			
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Mode	Bandwidth	Modulation	OBW [MHz]
	20 MHz	QPSK	18.03
		16QAM	18.05
	15 MHz	QPSK	13.51
LTE Band		16QAM	13.54
41(PC3)		QPSK	9.08
	10 MHz	16QAM	9.04
	5 MHz	QPSK	4.50
		16QAM	4.53

Table 7-5. Occupied Bandwidth Result - LTE - Ant1

FCC ID: A3LSMS928JPN		PART 27 MEASUREMENT REPORT			
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LTE Band 41(PC3) – Ant1

Keysight Spectrum Analyzer - Occupied BW					
2 ŘL RF 50Ω AC		SENSE:INT Center Freq: 2.59300000 Trig: Free Run A #Atten: 36 dB	0 GHz wg Hold: 100/100	11:12:15 AM Sep 12, 2023 Radio Std: None Radio Device: BTS	Trace/Detector
10 dB/div Ref 40.00 dBm					
20.0		ana the file of the second	, may		Clear Writ
10.0 0.00 10.0 20.0	Net		withous	north/2311/worles.com	Averag
30.0 40.0 50.0					Max Hol
Center 2.59300 GHz Res BW 470 kHz		#VBW 1.5 MHz		Span 50.00 MHz Sweep 1 ms	Min Ho
Occupied Bandwidth 18	י .025 MH	Total Pow Z	ver 32.	6 dBm	Detecto
Transmit Freq Error	-7.544 kH	z % of OBW	Power 99	9.00 %	Auto Ma
x dB Bandwidth	20.44 MH	lz xdB	-26	.00 dB	
50			STATU	5	

Plot 7-1. Occupied Bandwidth Plot (LTE Band 41(PC3) - 20MHz QPSK - Full RB - Ant1)



Plot 7-2. Occupied Bandwidth Plot (LTE Band 41(PC3) - 20MHz 16-QAM - Full RB - Ant1)

FCC ID: A3LSMS928JPN		PART 27 MEASUREMENT REPORT	Approved by: Technical Manager
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Keysight Spectrum Analyzer - Occupie							- 6 💼
2 RL RF 50 Q A	#FGain:Low	SENSE:INT Center Freq: 2.5930000 Trig: Free Run #Atten: 36 dB	ALIGN AUTO 000 GHz Avg Hold:>100/100	Radio Std: Nor Radio Device: I	10	Trace	Detector
		ر. مەرەرە، مەمىرا چەرەر يىلىدەن	~6004			c	lear Write
0.00 -10.0 -20.0 -30.0	110-1		Witch	habelenthe	يەربەلەر مەلىرىد		Average
-50.0							Max Hold
Center 2.59300 GHz Res BW 360 kHz Occupied Bandwi	dth	#VBW 1.1 MH Total Po		Span 37.50 Sweep 6 dBm			Min Hold
	13.511 MH		N Bower	00 %		Auto	Detector Peak
Transmit Freq Error x dB Bandwidth	10.026 k 14.93 M			0.00 % 00 dB		Auto	Man
MSG			G STATU	5	_		

Plot 7-3. Occupied Bandwidth Plot (LTE Band 41(PC3) - 15MHz QPSK - Full RB - Ant1)



Plot 7-4. Occupied Bandwidth Plot (LTE Band 41(PC3) - 15MHz 16-QAM - Full RB - Ant1)

FCC ID: A3LSMS928JPN		PART 27 MEASUREMENT REPORT				
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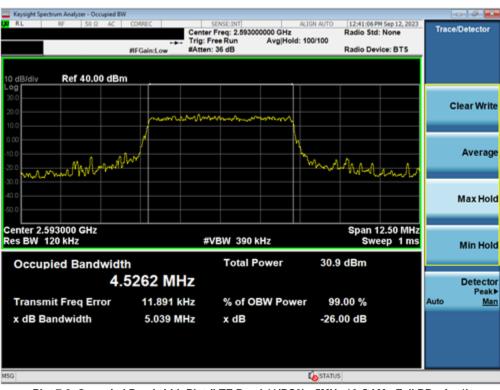
Plot 7-6. Occupied Bandwidth Plot (LTE Band 41(PC3) - 10MHz 16-QAM - Full RB - Ant1)

FCC ID: A3LSMS928JPN		PART 27 MEASUREMENT REPORT				
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Plot 7-7. Occupied Bandwidth Plot (LTE Band 41(PC3) - 5MHz QPSK - Full RB - Ant1)



Plot 7-8. Occupied Bandwidth Plot (LTE Band 41(PC3) - 5MHz 16-QAM - Full RB - Ant1)

FCC ID: A3LSMS928JPN		PART 27 MEASUREMENT REPORT					
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Mode	Bandwidth	Modulation	OBW [MHz]
		BPSK	96.94
	100MHz	QPSK	97.69
		16QAM	97.78
		BPSK	87.22
	90MHz	QPSK	87.75
		16QAM	87.61
		BPSK	77.32
	80MHz	QPSK	77.44
		16QAM	77.52
		BPSK	64.31
	70MHz	QPSK	67.56
		16QAM	67.45
		BPSK	57.94
	60MHz	QPSK	57.95
		16QAM	58.01
	50MHz	BPSK	45.89
		QPSK	47.73
NR Band		16QAM	47.67
n41 PC3		BPSK	35.86
	40MHz	QPSK	37.99
		16QAM	38.03
		BPSK	26.99
	30MHz	QPSK	28.01
		16QAM	27.97
		BPSK	23.07
	25MHz	QPSK	23.32
		16QAM	23.32
		BPSK	18.03
	20MHz	QPSK	18.34
		16QAM	18.36
		BPSK	12.99
	15MHz	QPSK	13.67
		16QAM	13.69
		BPSK	8.71
	10MHz	QPSK	8.65
		16QAM	8.67

 ToQAM
 8.67

 Table 7-6. Occupied Bandwidth Results – NR – Ant1

FCC ID: A3LSMS928JPN		PART 27 MEASUREMENT REPORT	Approved by: Technical Manager	
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NR Band n41 – Ant1

Spectrum Analyzer 1	+			Trace	- * 器
R L +++ Coupling: DC Align: Auto	Input Z: 50 Ω Atten: 28 df Corr CCorr Freq Ref: Int (S) NFE: Off	Gate: Off Avg He	r Freq: 2.593000000 GHz old: 100/100 Std: None	Trace Type Clear / Write	Trace Control
1 Graph				Trace Average	Detector
Scale/Div 10.0 dB	Ref Value 4	0.00 dBm		Max Hold	
30.0 20.0 10.0	a the same from the same the	re-		Min Hold	
-10.0			PEAK	Restart Max Hold	
-30.0 -40.0					
Center 2.5930 GHz Res BW 2.4000 MHz	ا Video BW 8#	3.0000 MHz	Span 250 MHz Sweep 1.00 ms (1001 pts)		
2 Metrics					
Occupied Bandwidth 96.94	0 MHz	Total Power	32.5 dBm		
Transmit Freq Error x dB Bandwidth	-538.68 kHz 102.6 MHz	% of OBW Power x dB	99.00 % -26.00 dB		
	Jan 17, 2024				

Plot 7-9. Occupied Bandwidth Plot (NR Band n41 - 100MHz π/2 BPSK - Full RB Configuration - Ant1)

Spectrun Occupied	n Analyze d BW	er 1 🔻	+										Trace	- * 影
RL	C	nput: RF Coupling: DC Ilign: Auto	Input Z: Corr CC Freq Re NFE: Of	orr f: Int (S)	Atten: 28 dB	Ga	te: Off	e Run f : Low	Center Fre Avg Hold: Radio Std:		00 GHz	Trace Typ Clear	oe / Write	Trace Control
1 Graph		•										Trace	Average	Detector
	iv 10.0 d	в		R	ef Value 40.0	0 dBm								
Log 30.0												Max H	lold	
20.0				water months	والمريك ومرود الماري والمروان	markethe	1945 m	and the second second				Min H	old	
10.0									\			<u> </u>		
-10.0			/						\				t Max Hold	
-20.0	- Angeling Markey	LANG MARANA	mound						Turner	r-law-mana	PEAK			
-40.0														
-50.0														
Center 2	2.5930 G			#V	ideo BW 8.00	000 MH;	z				pan 250 MH ns (1001 pts			
									3	weep 1.00 r	ns (1001 pts			
2 Metrics		•												
	Occupie	ed Bandwidth	92 MHz			-	4-1 D			00.0	10			
	T			105 00 111-				ower	-	29.8				
	x dB Ba	it Freq Error		195.88 kHz 103.6 MHz			dB	BW Powe	ir -	-26.0	00 % 0 dB			
			Jan 43	2 0004										
H۴	າ (▝ĽĽ		7, 2024 50 AM										

Plot 7-10. Occupied Bandwidth Plot (NR Band n41 - 100MHz QPSK - Full RB Configuration - Ant1)

FCC ID: A3LSMS928JPN		PART 27 MEASUREMENT REPORT				
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Spectrum Anal Occupied BW KEYSIGHT RL	· · · · ·	H Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Off	Atten: 28 dB	Gate:	iree Run Off ain: Low	Center Freq. Avg Hold: 10 Radio Std: N		GHz	Trace Type Clear / W	Trace ⁽ rite	Trace Control
1 Graph	•								Trace Ave	erage	Detector
Scale/Div 10.0 Log 30.0 20.0 10.0 -10.0 -20.0 -30.0			Ref Value 40.			Monsonality	al and the second second	PEAK	Max Hold		
-40.0 -50.0		#	Video BW 8.0	000 MHz		Sw	Spa veep 1.00 ms	an 250 MHz : (1001 pts)			
	pied Bandwidth 97.7 smit Freq Error	78 MHz -122.20 kł	Iz		Power OBW Powe	er	29.8 dB 99.00	_			
	Bandwidth	103.5 MH		x dB			-26.00 c	iB			

Plot 7-11. Occupied Bandwidth Plot (NR Band n41 - 100MHz 16-QAM - Full RB Configuration - Ant1)



Plot 7-12. Occupied Bandwidth Plot (NR Band n41 - 90MHz π/2 BPSK - Full RB Configuration - Ant1)

FCC ID: A3LSMS928JPN		PART 27 MEASUREMENT REPORT				
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Spectrum Ar Occupied BV		+							₽	Trace	· 米
KEYSIGH RL ↔	Coupling: DC	Input Ζ: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Off	Atten: 30 dB	Gate:	ree Run Off ain: Low	Center Freq Avg Hold: 1 Radio Std: 1) GHz	Trace Type Clear / \	Nrite	Trace Control
1 Graph Scale/Div 1	▼ 0.0 dB	<u> </u>	Ref Value 40.0	00 dBm					Trace A		Detector
Log 30.0 20.0 10.0			unterpart filmen son optime	-ht-matrices	a and a star of the				 Max Hol Min Hol 		
0.00 -10.0 -20.0 -30.0	NUMBER CONTRACTOR	mandaraha				mounder	an some stand for the state	PEAK	Restart N	/lax Hold	
-30.0 -40.0 -50.0 Center 2.59	20.047		Video BW 8.0					an 225 MHz			
Res BW 2.2		#				Sw	veep 1.00 ms				
	, cupied Bandwidth										
		749 MHz		Total	Power		29.9 dE	3m			
	nsmit Freq Error B Bandwidth	-309.80 kH 92.93 MH		% of x dB	OBW Pow	er	99.00 -26.00				
()	6	? Jan 17, 2024 12:39:46 PM									

Plot 7-13. Occupied Bandwidth Plot (NR Band n41 - 90MHz QPSK - Full RB Configuration - Ant1)



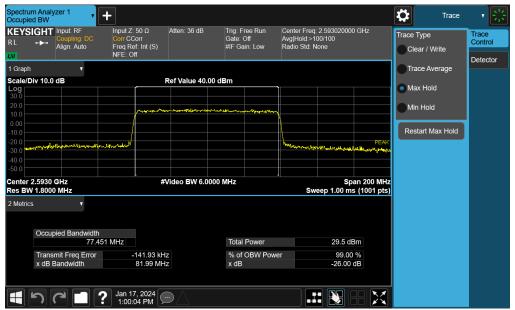
Plot 7-14. Occupied Bandwidth Plot (NR Band n41 - 90MHz 16-QAM - Full RB Configuration - Ant1)

FCC ID: A3LSMS928JPN		PART 27 MEASUREMENT REPORT				
Test Report S/N:	Test Dates:	EUT Type:	Page 28 of 123			
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Spectrum Anal Occupied BW	· · ·	+							Tra	ace 🔻 🔆
	Input: RF Coupling: DC Align: Auto	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Off	Atten: 36 dB	Gate:	ree Run Off iin: Low	Center Freq: Avg Hold:>1 Radio Std: N) GHz	Trace Type Clear / Write	Trace Control
1 Graph Scale/Div 10.0	• • dB	<u>.</u>	Ref Value 40.0	0 dBm					Trace Average	Detector
Log 30.0 20.0 10.0				or the state of th	ter and the second s				Min Hold	
0.00 -10.0 -20.0 -30.0	and the second s					Lowingston		PEAK	Restart Max Ho	bld
-40.0 -50.0 Center 2.5930			Video BW 6.00	000 MHz				an 200 MHz		
Res BW 1.800 2 Metrics	0 MHz T					Sw	eep 1.00 ms	s (1001 pts)		
Occu	pied Bandwidth 77.32	20 MHz		Total	Power		32.4 dE	Bm		
	smit Freq Error Bandwidth	-300.97 kH 81.58 MH		% of x dB	OBW Pow	er	99.00 -26.00			
1 5		Jan 17, 2024 12:59:38 PM								

Plot 7-15. Occupied Bandwidth Plot (NR Band n41 - 80MHz π/2 BPSK - Full RB Configuration - Ant1)



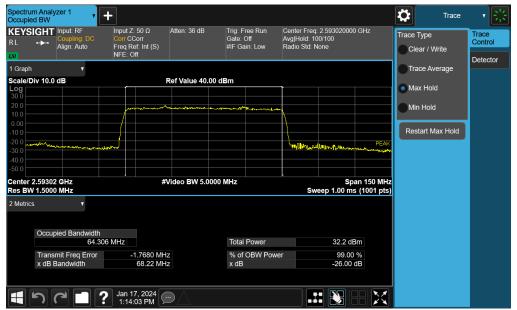
Plot 7-16. Occupied Bandwidth Plot (NR Band n41 - 80MHz QPSK - Full RB Configuration - Ant1)

FCC ID: A3LSMS928JPN		PART 27 MEASUREMENT REPORT				
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Spectrum A Occupied E	sw i	+							\$	Trace	- 湯
	HT Input: RF Coupling: DC Align: Auto	Input Ζ: 50 Ω Corr CCorr Freq Ref: Int (S)	Atten: 36 dB	Gate: 0	ree Run Off in: Low	Center Freq Avg Hold: 10 Radio Std: N) GHz	Trace Ty Clea	/pe r / Write	Trace Control
1 Graph Scale/Div	T0.0 dB	NFE: Off	Ref Value 40.0	00 dBm					Trac	e Average	Detector
Log 30.0 20.0 10.0					-draw-miler				 Max Min I 		
0.00 -10.0 -20.0 -30.0	بر المحاور المراجع الم	www.enerout				Landerweight	alati Mangabahan	PEAK	Resta	rt Max Hold	
-40.0 -50.0	930 GHz		Video BW 6.0	000 MHz			Sp	an 200 MHz			
Res BW 1. 2 Metrics						Sw		s (1001 pts)			
O	ccupied Bandwidth 77.5	22 MHz		Total	Power		29.6 dE	3m			
	ransmit Freq Error dB Bandwidth	-109.19 kH 81.93 MH		% of x dB	OBW Powe	er	99.00 -26.00				
4		? Jan 17, 2024 12:59:55 PM				, in the second s					

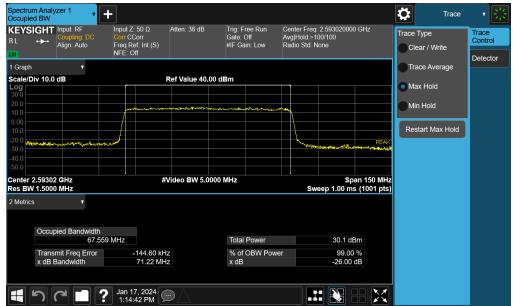
Plot 7-17. Occupied Bandwidth Plot (NR Band n41 - 80MHz 16-QAM - Full RB Configuration - Ant1)



Plot 7-18. Occupied Bandwidth Plot (NR Band n41 - 70MHz π/2 BPSK - Full RB Configuration - Ant1)

FCC ID: A3LSMS928JPN		PART 27 MEASUREMENT REPORT				
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Plot 7-19. Occupied Bandwidth Plot (NR Band n41 - 70MHz QPSK - Full RB Configuration - Ant1)



Plot 7-20. Occupied Bandwidth Plot (NR Band n41 - 70MHz 16-QAM - Full RB Configuration - Ant1)

FCC ID: A3LSMS928JPN		PART 27 MEASUREMENT REPORT				
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Spectrum Analy Occupied BW	yzer 1	+							*	Trace	- 張
RL ++-	Input: RF Coupling: DC Align: Auto	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S)	Atten: 36 dB	Trig: Fre Gate: O #IF Gair	ff	Center Freq: Avg Hold: 10 Radio Std: N) GHz	Trace Type Clear / W	/rite	Trace Control
1 Graph	▼	NFE: Off							Trace Av	erage	Detector
Scale/Div 10.0	dB		Ref Value 40.0	00 dBm					Max Hold	4	
30.0 20.0 10.0		funne	· • · · · · · · · · · · · · · · · · · ·	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~				Min Hold		
0.00								PEAK	Restart M	ax Hold	
-30.0 -40.0 -50.0	and the second states and the					Magerman Ma	and an a fail of the second	and for the weather			
Center 2.59302 Res BW 1.500		#\	Video BW 5.00	000 MHz	+	Sw		an 150 MHz s (1001 pts)			
2 Metrics	T										
Occuj	pied Bandwidth 57.938	8 MHz		Total F	ower		31.8 dE	3m			
	smit Freq Error Bandwidth	-171.23 kH: 61.51 MH:		% of C x dB	BW Powe	:r	99.00 -26.00				
1 5		Jan 17, 2024 1:38:41 PM									

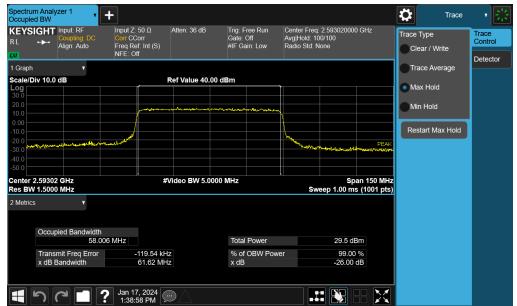
Plot 7-21. Occupied Bandwidth Plot (NR Band n41 - 60MHz π/2 BPSK - Full RB Configuration - Ant1)



Plot 7-22. Occupied Bandwidth Plot (NR Band n41 - 60MHz QPSK - Full RB Configuration - Ant1)

FCC ID: A3LSMS928JPN		PART 27 MEASUREMENT REPORT				
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Plot 7-23. Occupied Bandwidth Plot (NR Band n41 - 60MHz 16-QAM - Full RB Configuration - Ant1)



Plot 7-24. Occupied Bandwidth Plot (NR Band n41 - 50MHz π/2 BPSK - Full RB Configuration - Ant1)

FCC ID: A3LSMS928JPN		PART 27 MEASUREMENT REPORT				
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Spectrum Analy Occupied BW	· · · · ·	+							*	Trace	- 迷
RL +++	Input: RF Coupling: DC Align: Auto	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Off	Atten: 36 dB	Gate: (ree Run Off in: Low	Center Freq Avg Hold: 10 Radio Std: N) GHz	Trace Type Clear /		Trace Control
Lvr 1 Graph Scale/Div 10.0 20.0 10.0 0.00 -10.0 -20.0			Ref Value 40.C	00 dBm				PEAK	Max H		Detector
-30.0 -40.0 -50.0 Center 2.5930 Res BW 1.200	2 GHz		Video BW 4.00	000 MHz			Spa reep 1.00 ms	an 125 MHz			
		35 MHz	-		Power		29.6 dE				
	emit Freq Error Bandwidth	-118.07 kH 50.74 MH		% of x dB	OBW Powe		99.00 -26.00 d				

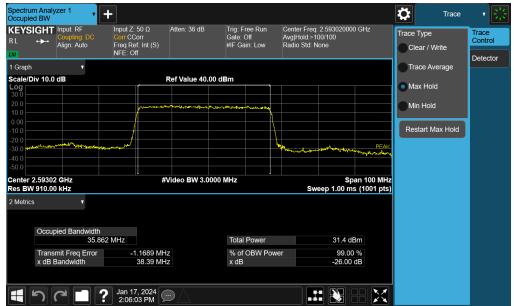
Plot 7-25. Occupied Bandwidth Plot (NR Band n41 - 50MHz QPSK - Full RB Configuration - Ant1)



Plot 7-26. Occupied Bandwidth Plot (NR Band n41 - 50MHz 16-QAM - Full RB Configuration - Ant1)

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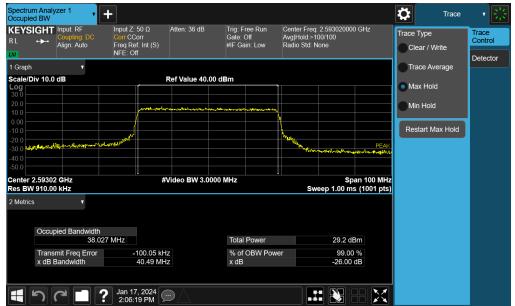
Plot 7-27. Occupied Bandwidth Plot (NR Band n41 - 40MHz π/2 BPSK - Full RB Configuration - Ant1)



Plot 7-28. Occupied Bandwidth Plot (NR Band n41 - 40MHz QPSK - Full RB Configuration - Ant1)

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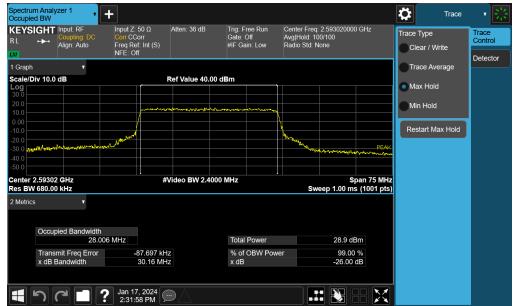
Plot 7-29. Occupied Bandwidth Plot (NR Band n41 - 40MHz 16-QAM - Full RB Configuration - Ant1)



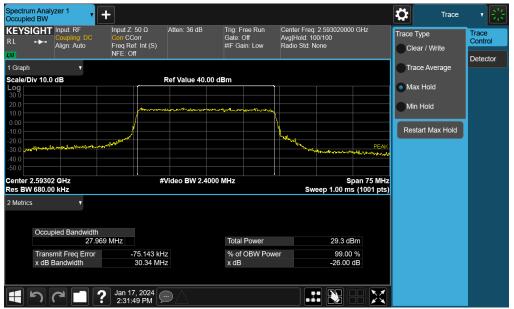
Plot 7-30. Occupied Bandwidth Plot (NR Band n41 - 30MHz π/2 BPSK - Full RB Configuration - Ant1)

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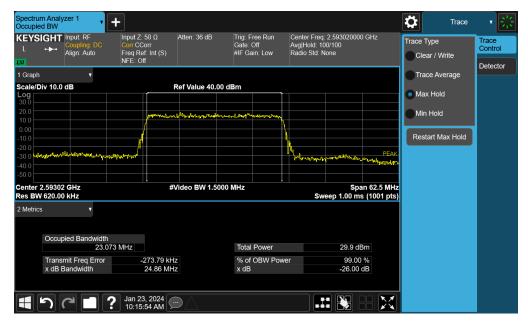
Plot 7-31. Occupied Bandwidth Plot (NR Band n41 - 30MHz QPSK - Full RB Configuration - Ant1)



Plot 7-32. Occupied Bandwidth Plot (NR Band n41 - 30MHz 16-QAM - Full RB Configuration - Ant1)

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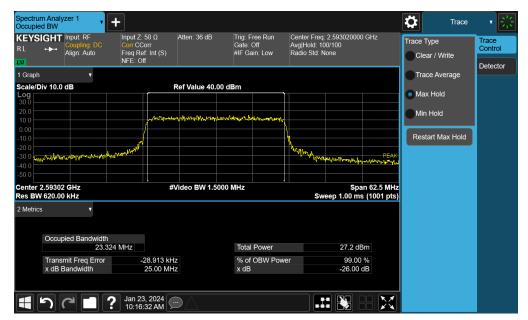
Plot 7-33. Occupied Bandwidth Plot (NR Band n41 - 25MHz π/2 BPSK - Full RB Configuration - Ant1)



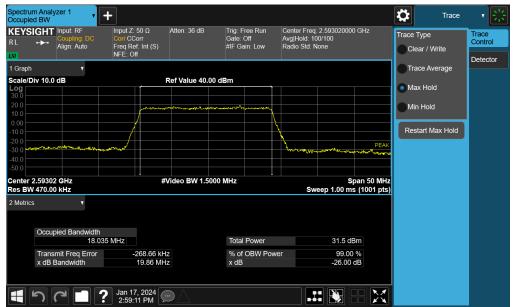
Plot 7-34. Occupied Bandwidth Plot (NR Band n41 - 25MHz QPSK - Full RB Configuration - Ant1)

FCC ID: A3LSMS928JPN	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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Plot 7-35. Occupied Bandwidth Plot (NR Band n41 - 25MHz 16-QAM - Full RB Configuration - Ant1)



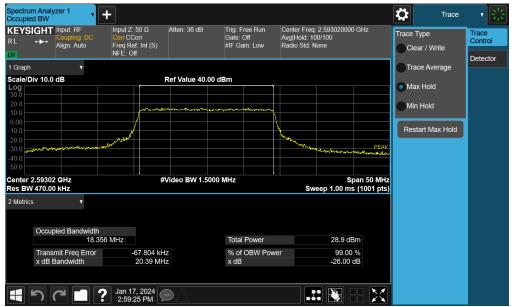
Plot 7-36. Occupied Bandwidth Plot (NR Band n41 - 20MHz π/2 BPSK - Full RB Configuration - Ant1)

FCC ID: A3LSMS928JPN	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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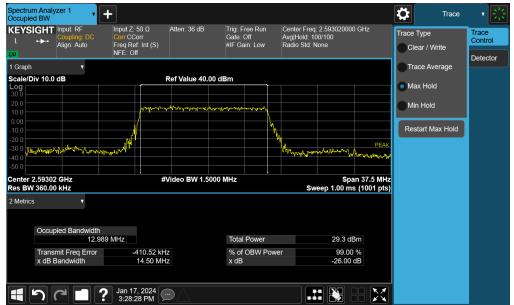
Plot 7-37. Occupied Bandwidth Plot (NR Band n41 - 20MHz QPSK - Full RB Configuration - Ant1)



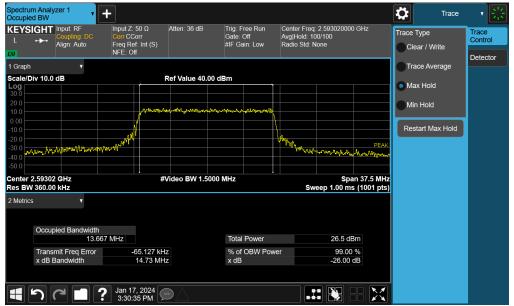
Plot 7-38. Occupied Bandwidth Plot (NR Band n41 - 20MHz 16-QAM - Full RB Configuration - Ant1)

FCC ID: A3LSMS928JPN	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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Plot 7-39. Occupied Bandwidth Plot (NR Band n41 - 15MHz π/2 BPSK - Full RB Configuration - Ant1)



Plot 7-40. Occupied Bandwidth Plot (NR Band n41 - 15MHz QPSK - Full RB Configuration - Ant1)

FCC ID: A3LSMS928JPN	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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Plot 7-41. Occupied Bandwidth Plot (NR Band n41 - 15MHz 16-QAM - Full RB Configuration - Ant1)



Plot 7-42. Occupied Bandwidth Plot (NR Band n41 - 10MHz π/2 BPSK - Full RB Configuration - Ant1)

FCC ID: A3LSMS928JPN		PART 27 MEASUREMENT REPORT	
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Plot 7-43. Occupied Bandwidth Plot (NR Band n41 - 10MHz QPSK - Full RB Configuration - Ant1)



Plot 7-44. Occupied Bandwidth Plot (NR Band n41 - 10MHz 16-QAM - Full RB Configuration - Ant1)

FCC ID: A3LSMS928JPN		PART 27 MEASUREMENT REPORT	
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Mode	Bandwidth	Modulation	OBW [MHz]
	20 MHz	QPSK	17.99
		16QAM	18.05
	15 MHz	QPSK	13.50
LTE Band		16QAM	13.46
41(PC3)	10 MHz	QPSK	9.00
		16QAM	9.03
	5 MHz	QPSK	4.53
		16QAM	4.50

Table 7-7. Occupied Bandwidth Result – LTE – Ant2

FCC ID: A3LSMS928JPN	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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LTE Band 41(PC3) – Ant2

Keysight Spectrum Analyzer - Occupied 8					
2 RL RF 50Ω AC	Trig	sense:ant] ter Freq: 2.593000000 G :: Free Run Avg] ten: 36 dB	ALIGN AUTO Hz Hold: 100/100	12:48:36 PM Sep 12, 2023 Radio Std: None Radio Device: BTS	Trace/Detector
10 dB/div Ref 40.00 dB	m				
20.0	punea parte	Mayant to start to the start of	~		Clear Write
0.00 100 200 200 200	Jul I		human	harrichtennen	Averag
40.0 50.0					Max Hol
Center 2.59300 GHz Res BW 470 kHz		#VBW 1.5 MHz		Span 50.00 MHz Sweep 1 ms	Min Hol
Occupied Bandwid	th 7.988 MHz	Total Power	32.3	dBm	Detecto
Transmit Freq Error	-21.736 kHz	% of OBW P	ower 99	.00 %	Auto Ma
x dB Bandwidth	19.65 MHz	x dB	-26.	00 dB	
56			to STATU:	3	

Plot 7-45. Occupied Bandwidth Plot (LTE Band 41(PC3) - 20MHz QPSK - Full RB - Ant2)



Plot 7-46. Occupied Bandwidth Plot (LTE Band 41(PC3) - 20MHz 16-QAM - Full RB - Ant2)

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Keysight Spectrum Analyzer - Occupied B					
	#FGain:Low	SENSE:INT Center Freq: 2.59300 Trig: Free Run #Atten: 36 dB	ALIGN AUTO 0000 GHz Avg[Hold:>100/100	01:10:18PM Sep 12, 2 Radio Std: None Radio Device: BTS	Trace/Detector
10 dB/div Ref 40.00 dB/ Log 20.0 10.0		al programme for forthermore	40//~~~v		Clear Write
000 -100 -200 -300	w/		humaly	therealized	Average
40.0					Max Hold
Center 2.59300 GHz Res BW 360 kHz Occupied Bandwidd	th	#VBW 1.1 M Total P		Span 37.50 M Sweep 1 r ƏdBm	
1:	3.499 MH	Iz			Detector Peak
Transmit Freq Error x dB Bandwidth	11.246 k 14.92 M		-26.	0.00 % 00 dB	Auto <u>Man</u>
MSG			Ko STATU:	5	

Plot 7-47. Occupied Bandwidth Plot (LTE Band 41(PC3) - 15MHz QPSK - Full RB - Ant2)



Plot 7-48. Occupied Bandwidth Plot (LTE Band 41(PC3) - 15MHz 16-QAM - Full RB - Ant2)

FCC ID: A3LSMS928JPN		PART 27 MEASUREMENT REPORT			
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Keysight Spectrum Analyzer - Occupied BW					
OM AL RF 50Ω AC	CORREC #FGain:Low	SENSE:INT Center Freq: 2.5930 Trig: Free Run #Atten: 36 dB	ALIGN AUTO 00000 GHz Avg Hold:>100/100	01:12:42 PM Sep 12, 7 Radio Std: None Radio Device: BTS	Trace/Detector
10 dB/div Ref 40.00 dBm 200 100					Clear Write
000 -100 -200 -300	M.		Maria	www.when.	Average
40.0					Max Hold
Center 2.59300 GHz Res BW 240 kHz Occupied Bandwidtl	h	#VBW 750		Span 25.00 M Sweep 1 5 dBm	
9.0	0023 MH	z			Detector Peak▶
Transmit Freq Error x dB Bandwidth	-6.618 ki 10.60 Mi		-26.	9.00 % .00 dB	Auto <u>Man</u>
MSG			to statu:	\$	

Plot 7-49. Occupied Bandwidth Plot (LTE Band 41(PC3) - 10MHz QPSK - Full RB - Ant2)



Plot 7-50. Occupied Bandwidth Plot (LTE Band 41(PC3) - 10MHz 16-QAM - Full RB - Ant2)

FCC ID: A3LSMS928JPN		PART 27 MEASUREMENT REPORT			
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Keysight Spectrum Analyzer - Occupied Bi						-) # 💽
00 RL RF 500 AC	#FGain:Low	SENSE:INT Center Freq: 2.59300000 Trig: Free Run #Atten: 36 dB	ALIGN AUTO 20 GHz Avg Hold: 100/100	01:14:21 PM Sep 12, 203 Radio Std: None Radio Device: BTS	Trac	eDetector
		mar an an an an an	my			Clear Write
000 -100 -200 -300 mlM_M_WWW/mW	N		han	unnhum		Average
-40.0						Max Hold
Center 2.593000 GHz Res BW 120 kHz Occupied Bandwidt	th	#VBW 390 kHz Total Pov		Span 12.50 MH Sweep 1 m 2 dBm		Min Hold
4.	5319 MH	z				Detector Peak
Transmit Freq Error x dB Bandwidth	3.630 ki 5.126 Mi		-26.	0.00 % 00 dB	Auto	Man
MSG			Ko STATU:	5		

Plot 7-51. Occupied Bandwidth Plot (LTE Band 41(PC3) - 5MHz QPSK - Full RB - Ant2)



Plot 7-52. Occupied Bandwidth Plot (LTE Band 41(PC3) - 5MHz 16-QAM - Full RB - Ant2)

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Mode	Bandwidth	Modulation	OBW [MHz]
meae			
	4001411	BPSK	97.02
	100MHz	QPSK	97.72
		16QAM	97.76
		BPSK	87.07
	90MHz	QPSK	87.73
		16QAM	87.74
		BPSK	77.21
	80MHz	QPSK	77.58
		16QAM	77.57
		BPSK	64.28
	70MHz	QPSK	67.66
		16QAM	67.54
		BPSK	57.97
	60MHz	QPSK	58.02
		16QAM	57.92
	50MHz	BPSK	45.85
		QPSK	47.64
NR Band		16QAM	47.75
n41 PC3		BPSK	36.04
	40MHz	QPSK	38.00
		16QAM	37.98
		BPSK	27.01
	30MHz	QPSK	27.96
		16QAM	27.99
		BPSK	23.03
	25MHz	QPSK	23.43
		16QAM	23.39
		BPSK	18.00
	20MHz	QPSK	18.35
		16QAM	18.35
		BPSK	12.99
	15MHz	QPSK	13.63
		16QAM	13.70
		BPSK	8.62
	10MHz	QPSK	8.65
		16QAM	8.62

 Image: International content of the second secon

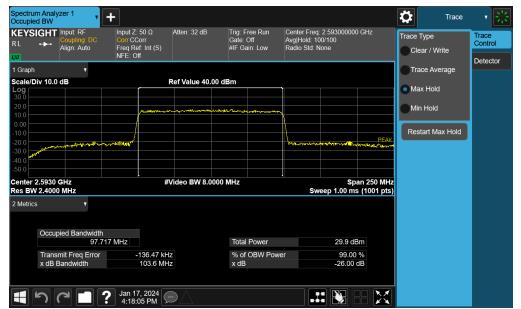
FCC ID: A3LSMS928JPN		PART 27 MEASUREMENT REPORT			
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NR Band n41 – Ant2



Plot 7-53. Occupied Bandwidth Plot (NR Band n41 - 100MHz π/2 BPSK - Full RB Configuration – Ant2)



Plot 7-54. Occupied Bandwidth Plot (NR Band n41 - 100MHz QPSK - Full RB Configuration - Ant1)

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Spectrum Analy Occupied BW		+	14 00 15	.		0.4.5	0.50000000		Trace	- * 影
	Input: RF Coupling: DC Align: Auto	Input Ζ: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Off	Atten: 28 dB	Gate	ree Run Off ain: Low	Center Freq Avg Hold: 10 Radio Std: N) GHz	Trace Type Clear / Write	Trace Control
1 Graph Scale/Div 10.0	v dB		Ref Value 40.	00 dBm					Trace Average	Detector
Log 30.0 20.0									Max Hold	
10.0 0.00		alaran daraa	ar an	anna Ini-relificana di					Min Hold	
-30.0	hadden of the second of the	tendrikan m				month	and the second second	PEAK		
-40.0 -50.0 Center 2.5930	047		Video BW 8.0					an 250 MHz		
Res BW 2.400						Sw		s (1001 pts)		
Occu	pied Bandwidth 97.7	78 MHz		Total	Power		29.8 dE	Bm		
	smit Freq Error Bandwidth	-122.20 kH 103.5 MH		% of x dB	OBW Powe	er	99.00 -26.00			
۲		? Jan 17, 2024 11:22:00 AM								

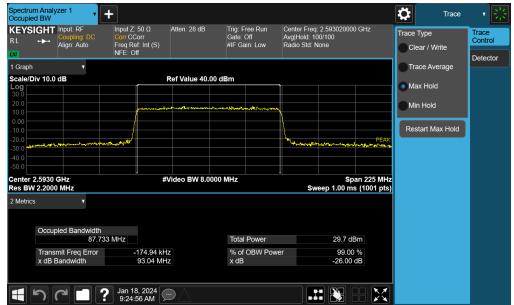
Plot 7-55. Occupied Bandwidth Plot (NR Band n41 - 100MHz 16-QAM - Full RB Configuration – Ant2)



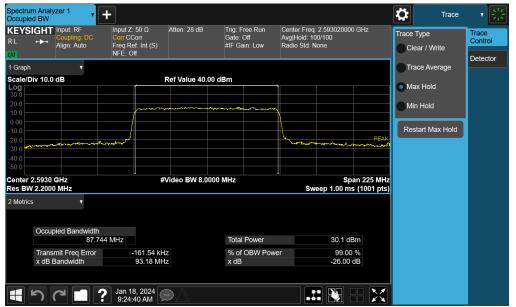
Plot 7-56. Occupied Bandwidth Plot (NR Band n41 - 90MHz π/2 BPSK - Full RB Configuration - Ant2)

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Plot 7-57. Occupied Bandwidth Plot (NR Band n41 - 90MHz QPSK - Full RB Configuration – Ant2)



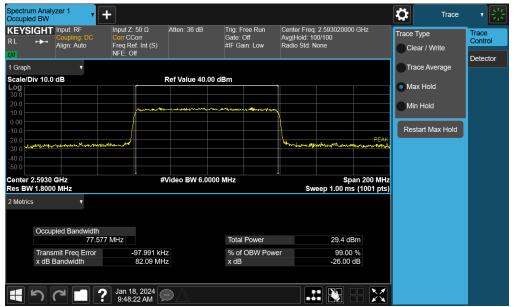
Plot 7-58. Occupied Bandwidth Plot (NR Band n41 - 90MHz 16-QAM - Full RB Configuration – Ant2)

FCC ID: A3LSMS928JPN		PART 27 MEASUREMENT REPORT			
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Spectrum Analy. Occupied BW	'L	+							‡	Trace	- * 器
KEYSIGHT RL +→-•	Input: RF Coupling: DC Align: Auto	Input Z: 50 ! Corr CCorr Freq Ref: In		Gate	Free Run Off ain: Low	Center Freq: Avg Hold:>1 Radio Std: N) GHz	Trace Type Clear / \		Trace Control
LNI 1 Graph		NFE: Off							Trace A		Detector
Scale/Div 10.0	dB		Ref Value 4	10.00 dBm					Max Ho	ld	
30.0 20.0 10.0		,	and the second	hadden (that the second of the	hearthan				Min Hol		
0.00 -10.0 -20.0								PEAK	Restart M	<i>N</i> ax Hold	
-30.0 -40.0 -50.0	8 ⁻²⁴ 9- 9-29-29-29-29-20-20-20-20-20-20-20-20-20-20-20-20-20-	<u>من معلمان</u>					nternet angefaka persona	n Jagone Hanner			
Center 2.5930 (Res BW 1.8000		ļ	#Video BW (6.0000 MHz		Sw		an 200 MHz s (1001 pts)			
2 Metrics	۲										
Occup	ied Bandwidth 77.20	05 MHz		Total	Power		31.5 dE	ßm			
	mit Freq Error andwidth		.33 kHz 42 MHz	% of x dB	OBW Powe	er	99.00 -26.00				
4 50		Jan 18, 20 9:47:50 A									

Plot 7-59. Occupied Bandwidth Plot (NR Band n41 - 80MHz π/2 BPSK - Full RB Configuration – Ant2)



Plot 7-60. Occupied Bandwidth Plot (NR Band n41 - 80MHz QPSK - Full RB Configuration - Ant2)

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Spectrum Analy Occupied BW		+							Trace	- ※
RL +++	Input: RF Coupling: DC Align: Auto	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S)	Atten: 36 dB	Gate:	ree Run Off ain: Low	Center Freq: Avg Hold:>1 Radio Std: N) GHz	Trace Type Clear / Write	Trace Control
1 Graph Scale/Div 10.0	v dB	NFE: Off	Ref Value 40.0	00 dBm					Trace Average	Detector
Log 30.0 20.0 10.0		and and a second		ՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠ	Mar Room William				Max Hold	
0.00 -10.0 -20.0 -30.0 -40.0	asth drawton name and	on and the second s				han and the same with	haat birdentrationstrations	PEAK Nyin Maran	Restart Max Hold	
-50.0 Center 2.5930 Res BW 1.800			≇Video BW 6.0	000 MHz		Sw	Spa Space Sp	an 200 MHz s (1001 pts)		
2 Metrics	▼ pied Bandwidth									
		571 MHz		Total	Power		29.9 dE	ßm		
	smit Freq Error Bandwidth	-98.360 kl 82.06 M		% of x dB	OBW Powe		99.00 -26.00			
1 5	C	? Jan 18, 2024 9:48:11 AM								

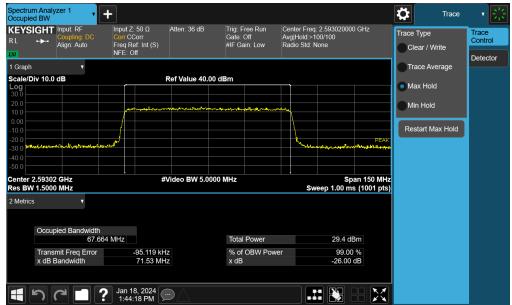
Plot 7-61. Occupied Bandwidth Plot (NR Band n41 - 80MHz 16-QAM - Full RB Configuration – Ant2)



Plot 7-62. Occupied Bandwidth Plot (NR Band n41 - 70MHz π/2 BPSK - Full RB Configuration – Ant2)

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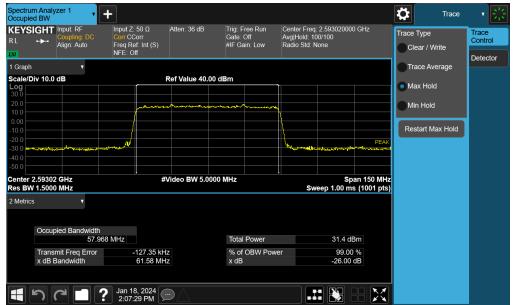
Plot 7-63. Occupied Bandwidth Plot (NR Band n41 - 70MHz QPSK - Full RB Configuration – Ant2)



Plot 7-64. Occupied Bandwidth Plot (NR Band n41 - 70MHz 16-QAM - Full RB Configuration – Ant2)

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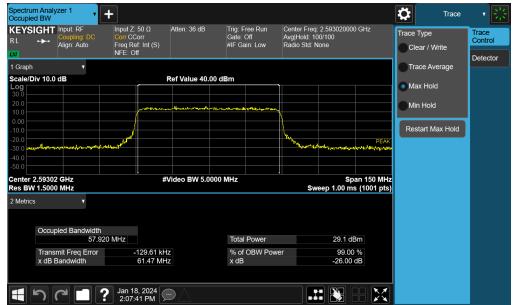
Plot 7-65. Occupied Bandwidth Plot (NR Band n41 - 60MHz π/2 BPSK - Full RB Configuration – Ant2)



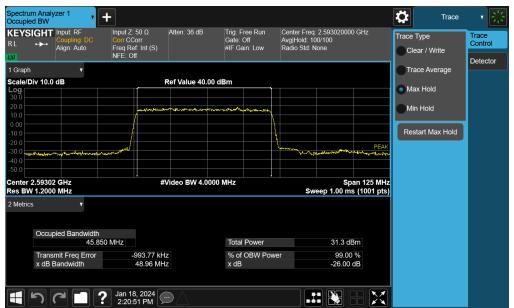
Plot 7-66. Occupied Bandwidth Plot (NR Band n41 - 60MHz QPSK - Full RB Configuration - Ant2)

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Plot 7-67. Occupied Bandwidth Plot (NR Band n41 - 60MHz 16-QAM - Full RB Configuration – Ant2)



Plot 7-68. Occupied Bandwidth Plot (NR Band n41 - 50MHz π/2 BPSK - Full RB Configuration – Ant2)

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