

TEST REPORT

 CTK Co., Ltd. (Ho-dong), 113, Yejik-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, 17142, Korea Tel: +82-1551-9871 Fax: +82-31-624-9501	Report No.: CTK-2026-01690 Page (1) / (169) pages	
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1. Applicant

- Name: Samsung Electronics Co., Ltd.
- Address: 129, Samsung-ro, Yeongtong-gu, Suwon-si Gyeonggi-do, 16677, Korea
- Date of Receipt: 2026-06-11

2. Manufacturer

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

3. Use of Report: For FCC Class III permissive change

4. Test sample / Model: MMU (MT6402) / MT6402-48A

5. Date(s) of test: 2026-06-11 to 2026-07-07

6. Test Standard (Method) used: FCC 47 CFR Part 96, ANSI C63.26-2015

7. Testing Environment: Refer to 9 page

8. Test Results: Compliance

9. Location of Test: ☒ Permanent Testing Lab ☐ On Site Testing

(Address : 5, Dongbu-ro 221beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, Korea)

The results shown in this test report refer only to the sample(s) tested unless otherwise stated.
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Approval	Tested by	Technical Manager
	Du-Jin Kim: (Signature)	Byung-Kwon In: (Signature)

2026-07-07

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MEASUREMENT REPORT

FCC Rule Part 96

Mode	Tx Frequency (MHz)	Max. PSD Power (dBm/MHz)	Max. EIRP Power (dBm/10MHz)	Max. EIRP Power (dBm)	Max. EIRP Power (W)	Max Emission Designator	Modulation
NR_n48_1C_10M	3 550 to 3 700	36.28	45.54	45.54	35.81	8M69G7D	QPSK
		36.36	45.77	45.77	37.76	8M70W7D	QAM
NR_n48_2C_10M +20M	3 550 to 3 700	36.44	45.88	50.56	113.76	28M5G7D	QPSK
		36.36	45.90	50.52	112.72	28M4W7D	QAM
NR_n48_3C_10M +20M+20M	3 550 to 3 700	36.05	45.92	52.92	195.88	48M4G7D	QPSK
		36.23	45.98	52.64	183.65	48M4W7D	QAM
NR_n48_3C_10M +20M+40M	3 550 to 3 700	36.17	45.83	53.69	233.88	68M2G7D	QPSK
		36.20	45.97	53.78	238.78	68M2W7D	QAM

EUT Overview Table

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1.0 REVISION RECORD

Issue Number	Issued Date	Revision History
CTK-2026-01690	2026-07-07	Initial Issue

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2.0 INTRODUCTION

2.1 Scope

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

2.2 Laboratory Accreditations and Listings

Country	Agency	Registration Number
USA	FCC	805871
CANADA	ISED	CN : 8737A CAB ID : KR0025
KOREA	NRRA	KR0025

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3.0 PRODUCT INFORMATION

3.1 Equipment Description

The Equipment Under Test (EUT) is the **MMU (MT6402)**, **FCC ID: A3LMT6402-48A**. 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 96. A Class III permissive change on the original filing is being pursued to add NR 10MHz bandwidth without hardware modifications.

3.2 Device Capabilities

This device supports the following conditional features and filter information:

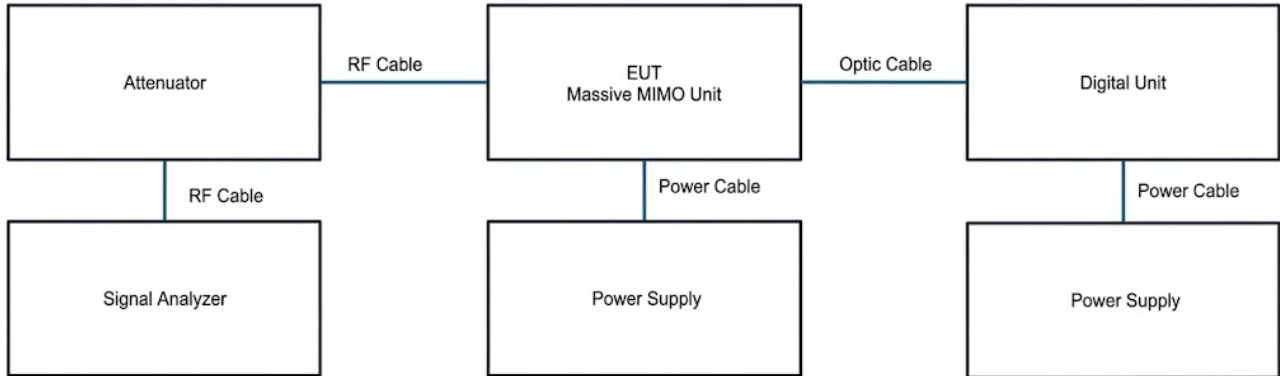
FCC ID:	A3LMT6402-48A		
FCC Classification	Citizens Band Category B Devices (CBD)		
EUT Type:	MMU (MT6402)		
Model Name:	MT6402-48A		
Test Device Serial No:	S525948444		
Device Capabilities:	LTE, 5G NR		
Software Version	SVR26B		
Operating Band/Frequency Range:	Band	Tx (Downlink)	Rx (Uplink)
	B48/n48:	3550 MHz to 3700 MHz	3550 MHz to 3700 MHz
Supported Modulation:	QPSK, 16QAM, 64QAM, 256QAM		
LTE Supported Number of Carriers and Channel Bandwidth:	10,20 MHz bandwidth modes for LTE B48 with up to 3CC aggregated of Max. Bandwidth 60 MHz.		
NR Supported Number of Carriers and Channel Bandwidth:	10, 20, 40 MHz bandwidth modes for NR n48 with up to 3CC aggregated of Max. Bandwidth 80 MHz.		
Supported Configurations:	Single carrier, Multi carrier		
Maximum Equivalent Isotropic Radiated Power:	45.3 dBm/ 10MHz per unit		
Antenna Configuration:	SU beam / MU beam / Common beam		
Number of Antenna ports:	64TRx		
Input Voltage:	DC -48V		
Antenna Gain:	SU, MU beam : 23.5dBi Common beam : 14.45dBi		

3.3 Test Configuration

The setup block diagram is as follows:

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

EUT setup block diagram



The following peripheral devices or interface cables were connected during the measurement:

Description	Item	Serial No.	Manufacturer
MMU to DU Optical cable	Optical cable	19030200	Samsung
MMU to DU Optical cable	Optical cable	19200078	Samsung
MMU Power Cable	Power Cable	E364222	Samsung

The Digital Unit (DU) used in the test was authorized under the SDoC procedure.



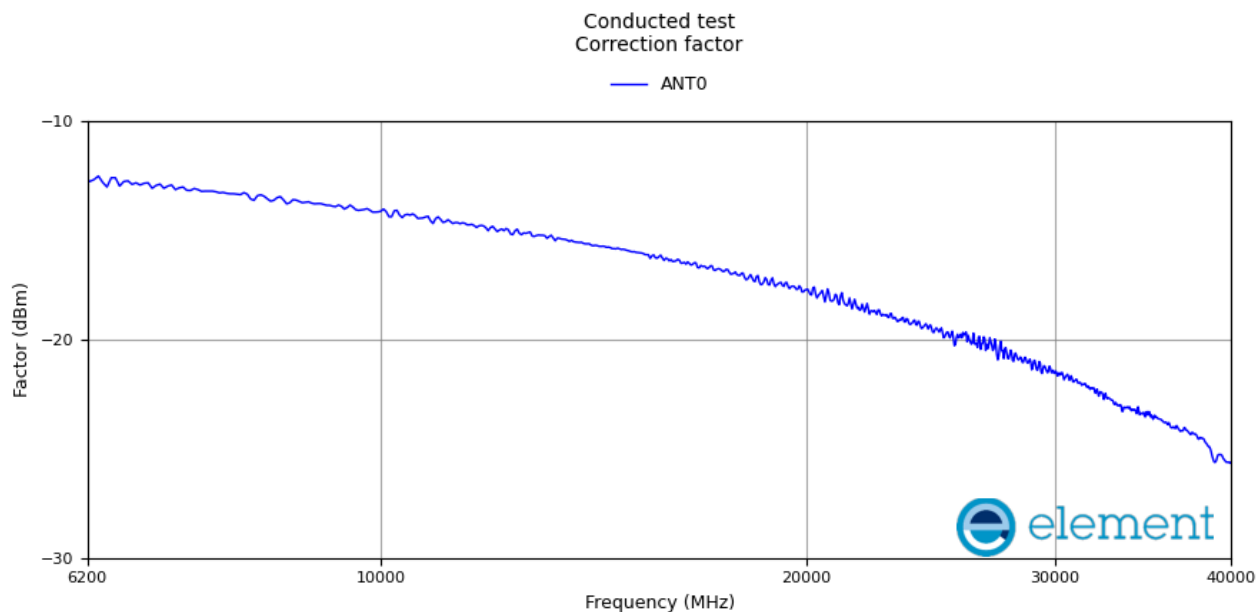
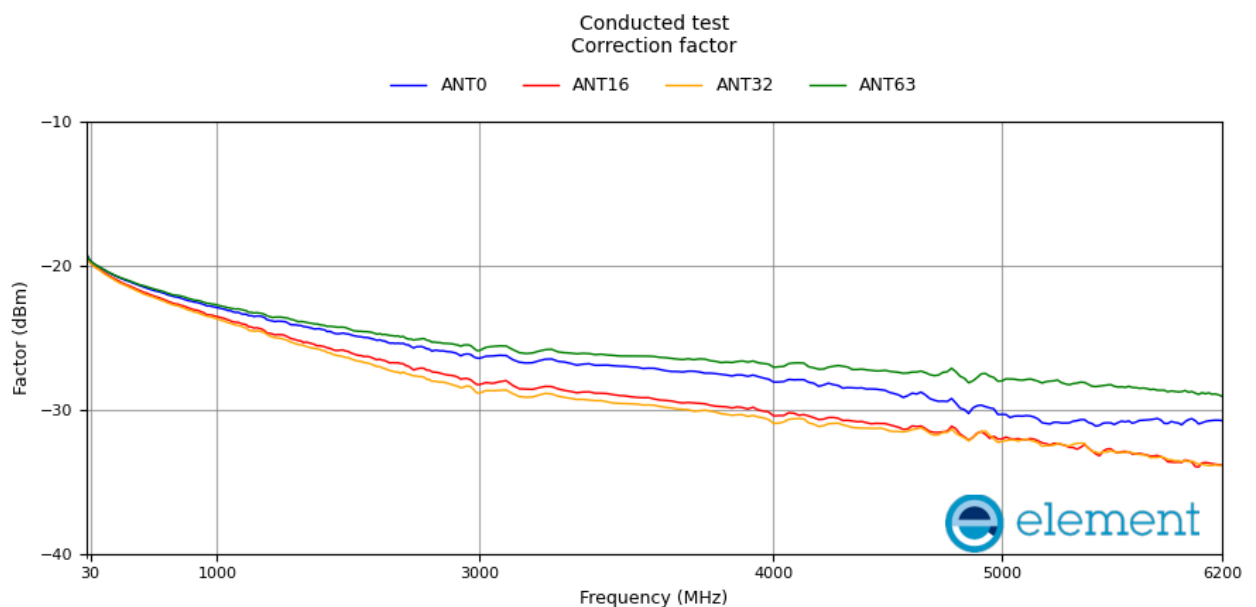
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Correction factors

An assessment was performed on the loss of all 64 ports, and only the results of the sample ports have been reported.



The correction factors for the 20 dB attenuator with cable below 6.2 GHz and the 10 dB attenuator with a high-pass filter and cable above 6.2 GHz have been applied to the conducted test plots

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

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

* Abbreviations:

- 1C: Single carrier
- 2C: Contiguous 2 carriers in multi-carrier operation, 3C: Contiguous 3 carriers in multi-carrier operation
- 2NC: Non-Contiguous 2 carriers in multi-carrier operation / 3NC: Non-Contiguous 3 carriers in multi-carrier operation

Configuration	No. of Carriers	Total Bandwidth (MHz)	Low (MHz)	Middle (MHz)	High (MHz)	Rated Power dBm/10MHz per unit
NR_n48_1C_10M	1	10	3555	3625	3695	45.3
NR_n48_2C_10M+20M	2	30	3565	3625	3685	45.3
NR_n48_2NC_10M+20M			3555 + 3690			
NR_n48_3C_10M+20M+20M	3	50	3575	3625	3675	45.3
NR_n48_3NC_10M+20M+20M			3555 + 3620 + 3690			
NR_n48_3C_10M+20M+40M	3	70	3585	3625	3665	45.3
NR_n48_3NC_10M+20M+40M			3555 + 3610 + 3680			

Table 3-1 EUT RF Configuration Table

Note

In Multi-carrier testing, the configurations were evaluated employing the worst-case antenna port and modulation for each band, derived from single-carrier results.

3.4 EMI Suppression Device(s)/Modifications

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

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4.0 DESCRIPTION OF TESTS

4.1 Measurement Procedure

The measurement procedures described in the document titled “American National Standard for Compliance Testing of Transmitter Used in Licensed Radio Service” (ANSI C63.26-2015) and the guidance provided in KDB 971168 D01 v03r01, and KDB 662911 D01 v02r01 and KDB 940660 D01 v03 were used in the measurement of the EUT.

Occupied Bandwidth:

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

Modulation Characteristics:

ANSI C63.26 - Section 5.3

Conducted Power Measurement and EIRP and PSD

KDB 971168 D01 v03r01 – Section 5.3
KDB 971168 D01 v03r01 – Section 5.4
KDB 662911 D01 v02r01 – Section E)2) In-Band Power Spectral Density (PSD) Measurements
b) Measure and sum spectral maxima across the outputs
ANSI C63.26-2015 – Section 5.2.5
ANSI C63.26-2015 – Section 5.2.4

Peak-to-Average Power Ratio:

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

Spurious and Harmonic Emissions at Antenna Terminal

KDB 971168 D01 v03r01 – Section 6
KDB 662911 D01 v02r01 – Section E)3) Out-of-Band and Spurious Emission Measurements
a) Absolute Emission Limits
ii) Measure and sum spectral maxima across the outputs
ANSI C63.26-2015 – Section 5.7

Radiated unwanted emission

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

Frequency Stability / Temperature Variation

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

4.2 Measurement Software

Test item	Name	Version
Conducted Measurement	Node B automation	1.0
Radiated Measurement	EP5RE	6.0.1.0
	ES10	10.001

4.3 Environmental Conditions

The temperature is controlled within the range of 15°C to 35°C. The relative humidity is controlled within the range of 10% to 75%. The atmospheric pressure is monitored within the range 86-106kPa (860-1060mbar).

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5.0 MEASUREMENT UNCERTAINTY

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

Description	Uncertainty
Conducted Power Measurement and EIRP	1.5 dB (C.L. : Approx. 95%, $k = 2$)
Occupied bandwidth	0.1 MHz (C.L. : Approx. 95%, $k = 2$)
Peak-to-average power ratio	1.0 dB (C.L. : Approx. 95%, $k = 2$)
Band Edge Emissions at Antenna Terminal	3.0 dB (C.L. : Approx. 95%, $k = 2$)
Spurious and Harmonic Emissions at Antenna Terminal	3.0 dB (C.L. : Approx. 95%, $k = 2$)
Radiated Emissions ($f \leq 1$ GHz)	4.11 dB (C.L. : Approx. 95%, $k = 2$)
Radiated Emissions ($f > 1$ GHz)	4.64 dB (C.L. : Approx. 95%, $k = 2$)
Frequency Stability	0.1 kHz (C.L. : Approx. 95%, $k = 2$)

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6.0 TEST EQUIPMENT LIST

Manufacture	Model	Description	Cal Date	Cal interval	Cal Due	Serial Number
Rohde & Schwarz	FSV30	Signal Analyzer	2025-11-25	Annual	2026-11-25	100925
Rohde & Schwarz	FSV40	Spectrum Analyzer	2026-01-13	Annual	2027-01-13	101574
Rohde & Schwarz	FSW43	Spectrum Analyzer	2026-03-14	Annual	2027-03-14	101250
Rohde & Schwarz	ESW44	EMI TEST RECEIVER	2026-04-27	Annual	2027-04-27	102039
TESEQ	CBL6111D	Bilog Antenna	2025-08-21	Annual	2027-08-21	60654
PASTERNAK	PE7AP006-06	Attenuator	2025-07-28	Annual	2026-07-28	L2021050400023
SONOMA	310N	AMPLIFIER	2025-07-28	Annual	2026-07-28	411011
AGILENT	8449B	Preamplifier	2026-03-11	Annual	2027-03-11	3008A00620
ETS-Lindgren	3115	Ridged Guide Antenna	2026-03-13	Annual	2027-03-13	78895
Keysight	N9030B	Signal Analyzer	2026-03-14	Annual	2027-03-14	MY57142018
RF ONE	RFHB1810SC10	Attenuator	2025-10-10	Annual	2026-10-10	RFHB1810SC10-0001
RF ONE	RFHB1810SC10	Attenuator	2025-10-10	Annual	2026-10-10	RFHB1810SC10-0002
RF ONE	RFHB1810SC10	Attenuator	2025-10-10	Annual	2026-10-10	RFHB1810SC10-0003
RF ONE	RFHB1810SC10	Attenuator	2025-10-10	Annual	2026-10-10	RFHB1810SC10-0004
RF ONE	RFHB1810SC10	Attenuator	2025-10-10	Annual	2026-10-10	RFHB1810SC10-0005
RF ONE	RFHB1810SC10	Attenuator	2025-10-10	Annual	2026-10-10	RFHB1810SC10-0006
RF ONE	RFHB1810SC10	Attenuator	2025-10-10	Annual	2026-10-10	RFHB1810SC10-0007
RF ONE	RFHB1810SC10	Attenuator	2025-10-10	Annual	2026-10-10	RFHB1810SC10-0008
RF ONE	RFHB1810SC10	Attenuator	2025-10-10	Annual	2026-10-10	RFHB1810SC10-0009
RF ONE	RFHB1810SC10	Attenuator	2025-10-10	Annual	2026-10-10	RFHB1810SC10-0010
RF ONE	RFHB1810SC10	Attenuator	2025-10-10	Annual	2026-10-10	RFHB1810SC10-0011
RF ONE	RFHB1810SC10	Attenuator	2025-10-10	Annual	2026-10-10	RFHB1810SC10-0012
RF ONE	RFHB1810SC10	Attenuator	2025-10-10	Annual	2026-10-10	RFHB1810SC10-0013
RF ONE	RFHB1810SC10	Attenuator	2025-10-10	Annual	2026-10-10	RFHB1810SC10-0014
RF ONE	RFHB1810SC10	Attenuator	2025-10-10	Annual	2026-10-10	RFHB1810SC10-0015
RF ONE	RFHB1810SC10	Attenuator	2025-10-10	Annual	2026-10-10	RFHB1810SC10-0016
RF ONE	RFHB1810SC10	Attenuator	2025-10-10	Annual	2026-10-10	RFHB1810SC10-0017
RF ONE	RFHB1810SC10	Attenuator	2025-10-10	Annual	2026-10-10	RFHB1810SC10-0018
RF ONE	RFHB1810SC10	Attenuator	2025-10-10	Annual	2026-10-10	RFHB1810SC10-0019

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RF ONE	RFHB1810SC10	Attenuator	2025-10-10	Annual	2026-10-10	RFHB1810SC10-0020
RF ONE	RFHB1810SC10	Attenuator	2025-10-10	Annual	2026-10-10	RFHB1810SC10-0021
RF ONE	RFHB1810SC10	Attenuator	2025-10-10	Annual	2026-10-10	RFHB1810SC10-0022
RF ONE	RFHB1810SC10	Attenuator	2025-10-10	Annual	2026-10-10	RFHB1810SC10-0023
RF ONE	RFHB1810SC10	Attenuator	2025-10-10	Annual	2026-10-10	RFHB1810SC10-0024
RF ONE	RFHB1810SC10	Attenuator	2025-10-10	Annual	2026-10-10	RFHB1810SC10-0025
RF ONE	RFHB1810SC10	Attenuator	2025-10-10	Annual	2026-10-10	RFHB1810SC10-0026
RF ONE	RFHB1810SC10	Attenuator	2025-10-10	Annual	2026-10-10	RFHB1810SC10-0027
RF ONE	RFHB1810SC10	Attenuator	2025-10-10	Annual	2026-10-10	RFHB1810SC10-0028
RF ONE	RFHB1810SC10	Attenuator	2025-10-10	Annual	2026-10-10	RFHB1810SC10-0029
RF ONE	RFHB1810SC10	Attenuator	2025-10-10	Annual	2026-10-10	RFHB1810SC10-0030
RF ONE	RFHB1810SC10	Attenuator	2025-10-10	Annual	2026-10-10	RFHB1810SC10-0031
RF ONE	RFHB1810SC10	Attenuator	2025-10-10	Annual	2026-10-10	RFHB1810SC10-0032
Qualwave	QFA1820-18-10-S	Attenuator	2025-08-08	Annual	2026-08-08	22265083
Qualwave	QFA1820-18-10-S	Attenuator	2025-08-08	Annual	2026-08-08	22265084
Qualwave	QFA1820-18-10-S	Attenuator	2025-08-08	Annual	2026-08-08	22265085
Qualwave	QFA1820-18-10-S	Attenuator	2025-08-08	Annual	2026-08-08	22265086
Qualwave	QFA1820-18-10-S	Attenuator	2025-08-08	Annual	2026-08-08	22265087
Qualwave	QFA1820-18-10-S	Attenuator	2025-08-08	Annual	2026-08-08	22265088
Qualwave	QFA1820-18-10-S	Attenuator	2025-08-08	Annual	2026-08-08	22265089
Qualwave	QFA1820-18-10-S	Attenuator	2025-08-08	Annual	2026-08-08	22265090
Qualwave	QFA1820-18-10-S	Attenuator	2025-08-08	Annual	2026-08-08	22265091
Qualwave	QFA1820-18-10-S	Attenuator	2025-08-08	Annual	2026-08-08	22265092
Qualwave	QFA1820-18-10-S	Attenuator	2025-08-08	Annual	2026-08-08	22265093
Qualwave	QFA1820-18-10-S	Attenuator	2025-08-08	Annual	2026-08-08	22265094
Qualwave	QFA1820-18-10-S	Attenuator	2025-08-08	Annual	2026-08-08	22265095
Qualwave	QFA1820-18-10-S	Attenuator	2025-08-08	Annual	2026-08-08	22265096
Qualwave	QFA1820-18-10-S	Attenuator	2025-08-08	Annual	2026-08-08	22265097
Qualwave	QFA1820-18-10-S	Attenuator	2025-08-08	Annual	2026-08-08	22265098
Qualwave	QFA1820-18-10-S	Attenuator	2025-08-08	Annual	2026-08-08	22265099
Qualwave	QFA1820-18-10-S	Attenuator	2025-08-08	Annual	2026-08-08	22265100

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Qualwave	QFA1820-18-10-S	Attenuator	2025-08-08	Annual	2026-08-08	22265101
Qualwave	QFA1820-18-10-S	Attenuator	2025-08-08	Annual	2026-08-08	22265102
Qualwave	QFA1820-18-10-S	Attenuator	2025-08-08	Annual	2026-08-08	22265103
Qualwave	QFA1820-18-10-S	Attenuator	2025-08-08	Annual	2026-08-08	22265105
Qualwave	QFA1820-18-10-S	Attenuator	2025-08-08	Annual	2026-08-08	22265106
Qualwave	QFA1820-18-10-S	Attenuator	2025-08-08	Annual	2026-08-08	22265107
Qualwave	QFA1820-18-10-S	Attenuator	2025-08-08	Annual	2026-08-08	22265108
Qualwave	QFA1820-18-10-S	Attenuator	2025-08-08	Annual	2026-08-08	22265109
Qualwave	QFA1820-18-10-S	Attenuator	2025-08-08	Annual	2026-08-08	22265110
Qualwave	QFA1820-18-10-S	Attenuator	2025-08-08	Annual	2026-08-08	22265111
Qualwave	QFA1820-18-10-S	Attenuator	2025-08-08	Annual	2026-08-08	22265112
Qualwave	QFA1820-18-10-S	Attenuator	2025-08-08	Annual	2026-08-08	22265113
Qualwave	QFA1820-18-10-S	Attenuator	2025-08-08	Annual	2026-08-08	22265114
Qualwave	QFA1820-18-10-S	Attenuator	2025-08-08	Annual	2026-08-08	22265115
Qualwave	QFA1820-18-10-S	Attenuator	2025-08-08	Annual	2026-08-08	22265116
EMTEST	RLA29210010-40-F	Attenuator	2025-08-08	Annual	2026-08-08	RLA29210010-40-F-0002
BROADTEK	SM-32	SWITCH MATRIX	2026-03-18	Annual	2027-03-18	ey32t001
BROADTEK	SM-32	SWITCH MATRIX	2026-03-18	Annual	2027-03-18	ey32t002
K&L MICROWAVE	11SH10-6200/T18000-O/O	High Pass Filter	2026-07-03	Annual	2027-07-03	00002
WAINWRIGHT	WHW-13000-18000-40000-40C	High Pass Filter	2026-03-14	Annual	2027-03-14	0002
AC POWER KOREA	DC Power Supply	ACPD-60150	2025-11-07	Annual	2026-11-07	DC-2

Table 6-1 Test Equipment 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.

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In accordance with ISO/IEC 17025 Annex A Metrological traceability, the metrological traceability for RF cables is verified via a self-assessment process, utilizing a calibrated Network Analyzer as the reference equipment.

Manufacture	Model	Description	Cal Date	Cal interval	Cal Due	Serial Number
Rohde & Schwarz	SMB100A	40GHz Signal Generator	2025-07-09	Annual	2026-07-09	182487

Table 6-2. Reference Equipment Calibration List

Manufacture	Model	Description	Self-assessment Check Date	interval	Check Due	Serial Number
Times Microwave	lh18h-smsm-2.0m	RF Cable (Conducted)	2026-05-29	Annual	2027-05-29	C1 to C64 (64 EA)
SENSORVIEW	2P92MST-3m	RF Cable (Conducted)	2026-05-29	Annual	2027-05-29	TPC2204120014
SENSORVIEW	2P92MST-3m	RF Cable (Conducted)	2026-05-29	Annual	2027-05-29	TPC2204120012
SENSORVIEW	2P92MST-3m	RF Cable (Conducted)	2026-05-29	Annual	2027-05-29	TPC2204120003
HUBER+SUHNER	SUCOFLEX 104	RF Cable (Radiated)	2026-03-05	Annual	2027-03-05	MY27558/4
Junkosha Inc.	MWX221	RF Cable (Radiated)	2026-01-20	Annual	2027-01-20	2008S246
Junkosha Inc.	MWX221	RF Cable (Radiated)	2026-01-20	Annual	2027-01-20	J0970749
Sensorview Co., LTD	13A26	RF Cable (Radiated)	2026-01-20	Annual	2027-01-20	TPC2204060007
Sensorview Co., LTD	9S40	RF Cable (Radiated)	2026-01-20	Annual	2027-01-20	TPC2204060009
Sensorview Co., LTD	9A40	RF Cable (Radiated)	2026-01-20	Annual	2027-01-20	TP210713-001

Table 6-3 RF Cable self-assessment Table

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7.0 SAMPLE CALCULATIONS

Emission Designator

QPSK Modulation

Emission Designator = 8M69G7D

Occupied Bandwidth = 8.69 MHz

G = Phase Modulation

7 = Quantized/Digital Info

D = Data transmission, telemetry, telecommand

QAM Modulation

Emission Designator = 8M70W7D

Occupied Bandwidth = 8.70 MHz

W = Amplitude/Angle Modulated

7 = Quantized/Digital Info

D = Data transmission, telemetry, telecommand

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8.0 TEST RESULTS

8.1 Summary

Company Name: SAMSUNG Electronics Co., Ltd.
FCC ID: A3LMT6402-48A
FCC Classification: Citizens Band Category B Devices (CBD)
Mode(s): LTE, NR

FCC Part Section(s)	Test Description	Test Limit	Test Condition	Test Result	Reference
2.1049	Occupied Bandwidth	N/A	Conducted	Pass	Section 8.2
96.41(a)	Modulation Characteristics	Digital modulation		Pass	(Note 4)
96.41(b)	Equivalent Isotropic Radiated Power (EIRP)	47 dBm/10MHz (EIRP)		Pass	Section 8.3
96.41(b)	Power Spectral Density (PSD)	37 dBm/MHz (PSD)		Pass	Section 8.4
96.41(g)	Peak-Average Ratio	≤ 13 dB		Pass	Section 8.5
96.41(e)	Out of Band Emissions	Within 0 MHz to 10 MHz above and below the assigned channel ≤ -13 dBm/MHz Greater than 10 MHz above and below the assigned channel ≤ -25 dBm/MHz Any emission below 3530 MHz and above 3720 MHz ≤ -40 dBm/MHz		Pass	Section 8.6 Section 8.7
2.1055	Frequency Stability	Fundamental emissions stay within authorized frequency block	Radiated	Pass	(Note 4)
2.1051 96.41(e)	Radiated unwanted emission	< -40dBm/MHz		Pass	Section 8.8

Table 8-1. Summary of Test Results

Notes:

- 1) All modes of operation and data rates were investigated. The test results shown in the following sections represent the worst case emissions.
- 2) The analyzer plots were all taken with a correction table loaded into the analyzer.
- 3) All antenna port conducted emissions testing was performed on a test bench with the antenna port of the EUT connected to the spectrum analyzer through calibrated cables and attenuators.
- 4) This is a variant report for enabling the channel bandwidth by software without any hardware modification. Frequency Stability test and Modulation Characteristics test is not affected by this change item, and it was already performed in the original report.

8.2 Occupied Bandwidth

Test Overview

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

Test Procedures Used

KDB 971168 D01 v03r01 – Section 4.3

ANSI C63.26-2015 – Section 5.4.4

Test Setting

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

1. The signal analyzer's automatic bandwidth measurement capability was used to perform the 99% occupied bandwidth 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 $\geq 3 \times$ RBW
4. Detector = Peak
5. Trace mode = max hold
6. Sweep = auto couple
7. The trace was allowed to stabilize
8. If necessary, steps 2 – 7 were repeated after changing the RBW such that it would be within 1 – 5% of the 99% occupied bandwidth observed in Step 7

Test Setup

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

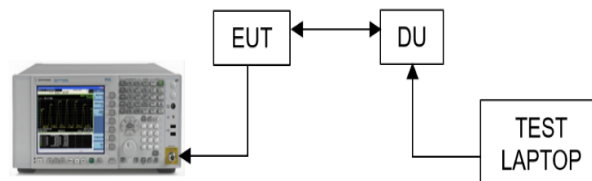


Figure 8-1. Test Instrument & Measurement Setup

Test Limit

None

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Channel	Port	Occupied Bandwidth (MHz)			
		QPSK	16QAM	64QAM	256QAM
Low	Port 0	8.61	8.63	8.68	8.65
	Port 1	8.63	8.61	8.61	8.63
	Port 2	8.63	8.61	8.68	8.65
	Port 3	8.62	8.62	8.62	8.62
	Port 4	8.62	8.66	8.63	8.61
	Port 5	8.64	8.61	8.64	8.63
	Port 6	8.62	8.63	8.62	8.66
	Port 7	8.63	8.61	8.65	8.62
	Port 8	8.63	8.66	8.61	8.63
	Port 9	8.62	8.62	8.63	8.61
	Port 10	8.61	8.63	8.66	8.64
	Port 11	8.64	8.63	8.66	8.64
	Port 12	8.62	8.63	8.64	8.65
	Port 13	8.67	8.64	8.65	8.65
	Port 14	8.63	8.63	8.66	8.62
	Port 15	8.62	8.63	8.64	8.65
	Port 16	8.66	8.61	8.62	8.65
	Port 17	8.64	8.67	8.63	8.63
	Port 18	8.64	8.64	8.60	8.64
	Port 19	8.62	8.61	8.63	8.65
	Port 20	8.63	8.65	8.63	8.61
	Port 21	8.65	8.65	8.63	8.65
	Port 22	8.62	8.62	8.65	8.62
	Port 23	8.63	8.62	8.60	8.63
	Port 24	8.62	8.66	8.62	8.63
	Port 25	8.60	8.65	8.64	8.62
	Port 26	8.62	8.63	8.63	8.63
	Port 27	8.66	8.62	8.66	8.64
	Port 28	8.62	8.65	8.63	8.64
	Port 29	8.63	8.61	8.62	8.66
	Port 30	8.63	8.63	8.69	8.61
	Port 31	8.62	8.62	8.66	8.64
	Port 32	8.61	8.60	8.66	8.61
	Port 33	8.63	8.70	8.65	8.65
	Port 34	8.63	8.61	8.68	8.63
	Port 35	8.63	8.64	8.62	8.66
	Port 36	8.62	8.61	8.62	8.62
	Port 37	8.64	8.66	8.66	8.62
	Port 38	8.63	8.64	8.65	8.65
	Port 39	8.63	8.65	8.69	8.62
	Port 40	8.63	8.63	8.64	8.65
	Port 41	8.63	8.62	8.66	8.62
	Port 42	8.63	8.65	8.65	8.68
	Port 43	8.63	8.62	8.63	8.62
	Port 44	8.67	8.65	8.64	8.66
	Port 45	8.63	8.67	8.63	8.65
	Port 46	8.62	8.66	8.66	8.63
	Port 47	8.64	8.63	8.60	8.63



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	Port 48	8.67	8.62	8.65	8.64
	Port 49	8.60	8.67	8.64	8.65
	Port 50	8.64	8.64	8.64	8.62
	Port 51	8.63	8.62	8.63	8.64
	Port 52	8.62	8.64	8.62	8.64
	Port 53	8.61	8.68	8.62	8.65
	Port 54	8.62	8.61	8.63	8.67
	Port 55	8.64	8.61	8.60	8.63
	Port 56	8.61	8.64	8.65	8.62
	Port 57	8.62	8.65	8.63	8.66
	Port 58	8.61	8.63	8.63	8.63
	Port 59	8.62	8.62	8.64	8.62
	Port 60	8.61	8.63	8.64	8.63
	Port 61	8.62	8.67	8.66	8.64
	Port 62	8.62	8.63	8.62	8.61
	Port 63	8.62	8.61	8.62	8.61
Mid	Port 0	8.61	8.62	8.63	8.66
	Port 1	8.67	8.61	8.62	8.62
	Port 2	8.63	8.62	8.65	8.66
	Port 3	8.69	8.63	8.65	8.63
	Port 4	8.60	8.64	8.64	8.68
	Port 5	8.68	8.62	8.66	8.63
	Port 6	8.66	8.66	8.63	8.65
	Port 7	8.63	8.62	8.65	8.64
	Port 8	8.61	8.66	8.68	8.62
	Port 9	8.62	8.63	8.63	8.64
	Port 10	8.60	8.62	8.64	8.65
	Port 11	8.60	8.69	8.64	8.62
	Port 12	8.62	8.63	8.63	8.66
	Port 13	8.61	8.67	8.64	8.64
	Port 14	8.63	8.60	8.62	8.63
	Port 15	8.65	8.63	8.64	8.65
	Port 16	8.63	8.66	8.62	8.64
	Port 17	8.63	8.62	8.63	8.65
	Port 18	8.66	8.62	8.66	8.67
	Port 19	8.63	8.61	8.63	8.66
	Port 20	8.64	8.63	8.62	8.67
	Port 21	8.64	8.61	8.64	8.64
	Port 22	8.60	8.61	8.64	8.64
	Port 23	8.61	8.65	8.65	8.62
	Port 24	8.66	8.66	8.61	8.63
	Port 25	8.67	8.64	8.64	8.66
	Port 26	8.60	8.65	8.63	8.62
	Port 27	8.63	8.64	8.65	8.65
	Port 28	8.62	8.63	8.64	8.63
	Port 29	8.63	8.62	8.62	8.67
	Port 30	8.65	8.67	8.66	8.61
	Port 31	8.61	8.68	8.64	8.64
	Port 32	8.63	8.67	8.63	8.62
	Port 33	8.62	8.62	8.64	8.65

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	Port 34	8.63	8.62	8.64	8.66
	Port 35	8.62	8.61	8.63	8.67
	Port 36	8.64	8.65	8.63	8.66
	Port 37	8.66	8.62	8.62	8.66
	Port 38	8.64	8.68	8.65	8.64
	Port 39	8.66	8.69	8.60	8.61
	Port 40	8.61	8.64	8.59	8.63
	Port 41	8.67	8.66	8.61	8.62
	Port 42	8.63	8.63	8.63	8.62
	Port 43	8.63	8.62	8.64	8.65
	Port 44	8.62	8.65	8.63	8.65
	Port 45	8.67	8.63	8.63	8.68
	Port 46	8.62	8.67	8.66	8.65
	Port 47	8.63	8.64	8.63	8.64
	Port 48	8.65	8.63	8.65	8.64
	Port 49	8.65	8.67	8.62	8.64
	Port 50	8.62	8.62	8.66	8.65
	Port 51	8.67	8.61	8.61	8.63
	Port 52	8.61	8.64	8.64	8.65
	Port 53	8.63	8.64	8.65	8.64
	Port 54	8.62	8.62	8.63	8.64
	Port 55	8.61	8.61	8.62	8.64
	Port 56	8.61	8.63	8.62	8.63
	Port 57	8.65	8.65	8.63	8.65
	Port 58	8.60	8.63	8.61	8.62
	Port 59	8.61	8.63	8.61	8.63
	Port 60	8.65	8.62	8.64	8.63
	Port 61	8.61	8.69	8.65	8.63
	Port 62	8.62	8.62	8.61	8.66
	Port 63	8.61	8.63	8.63	8.63
High	Port 0	8.65	8.65	8.62	8.64
	Port 1	8.66	8.67	8.65	8.58
	Port 2	8.64	8.63	8.66	8.63
	Port 3	8.62	8.63	8.64	8.64
	Port 4	8.62	8.64	8.65	8.66
	Port 5	8.62	8.67	8.64	8.63
	Port 6	8.62	8.62	8.65	8.62
	Port 7	8.62	8.66	8.64	8.62
	Port 8	8.65	8.61	8.65	8.63
	Port 9	8.65	8.63	8.64	8.63
	Port 10	8.61	8.63	8.67	8.61
	Port 11	8.64	8.61	8.66	8.67
	Port 12	8.63	8.60	8.64	8.64
	Port 13	8.64	8.62	8.66	8.64
	Port 14	8.62	8.62	8.66	8.65
	Port 15	8.63	8.66	8.64	8.62
	Port 16	8.66	8.62	8.63	8.63
	Port 17	8.67	8.62	8.66	8.61
	Port 18	8.63	8.64	8.65	8.60
	Port 19	8.65	8.61	8.66	8.66

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	Port 20	8.60	8.63	8.64	8.64
	Port 21	8.64	8.66	8.62	8.62
	Port 22	8.64	8.61	8.62	8.61
	Port 23	8.64	8.66	8.62	8.66
	Port 24	8.65	8.63	8.62	8.65
	Port 25	8.62	8.64	8.64	8.67
	Port 26	8.61	8.65	8.63	8.64
	Port 27	8.62	8.61	8.65	8.67
	Port 28	8.61	8.63	8.67	8.64
	Port 29	8.64	8.64	8.61	8.65
	Port 30	8.66	8.63	8.63	8.63
	Port 31	8.62	8.61	8.63	8.65
	Port 32	8.63	8.63	8.63	8.62
	Port 33	8.63	8.64	8.65	8.63
	Port 34	8.64	8.61	8.63	8.64
	Port 35	8.62	8.61	8.66	8.61
	Port 36	8.63	8.60	8.63	8.64
	Port 37	8.63	8.64	8.66	8.64
	Port 38	8.61	8.62	8.62	8.61
	Port 39	8.64	8.64	8.63	8.62
	Port 40	8.61	8.62	8.61	8.64
	Port 41	8.63	8.62	8.62	8.62
	Port 42	8.62	8.64	8.64	8.64
	Port 43	8.62	8.66	8.63	8.64
	Port 44	8.63	8.63	8.64	8.63
	Port 45	8.64	8.61	8.61	8.64
	Port 46	8.63	8.63	8.65	8.66
	Port 47	8.61	8.62	8.68	8.60
	Port 48	8.62	8.62	8.62	8.63
	Port 49	8.63	8.64	8.65	8.63
	Port 50	8.61	8.64	8.61	8.65
	Port 51	8.63	8.64	8.64	8.65
	Port 52	8.62	8.63	8.64	8.63
	Port 53	8.63	8.62	8.62	8.66
	Port 54	8.62	8.64	8.63	8.62
	Port 55	8.66	8.61	8.64	8.62
	Port 56	8.64	8.62	8.62	8.63
	Port 57	8.59	8.63	8.62	8.65
	Port 58	8.62	8.62	8.65	8.64
	Port 59	8.68	8.63	8.63	8.66
	Port 60	8.66	8.62	8.64	8.62
	Port 61	8.62	8.63	8.66	8.62
	Port 62	8.64	8.64	8.65	8.67
	Port 63	8.66	8.63	8.60	8.61

Table 8-2 OBW Test Result Table (NR_n48_1C_10M)

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Channel	Port	Occupied Bandwidth (MHz)	
		QPSK	16QAM
Low	Port 16	28.36	28.34
Mid	Port 61	28.33	28.44
High	Port 51	28.46	28.41

Table 8-3 OBW Test Result Table (NR_n48_2C_10M+20M)

Channel	Port	Occupied Bandwidth (MHz)	
		QPSK	16QAM
Low	Port 44	48.35	48.22
Mid	Port 46	48.16	48.43
High	Port 32	48.21	48.15

Table 8-4 OBW Test Result Table (NR_n48_3C_10M+20M+20M)

Channel	Port	Occupied Bandwidth (MHz)	
		QPSK	16QAM
Low	Port 56	68.01	68.17
Mid	Port 50	68.23	68.05
High	Port 32	68.11	68.09

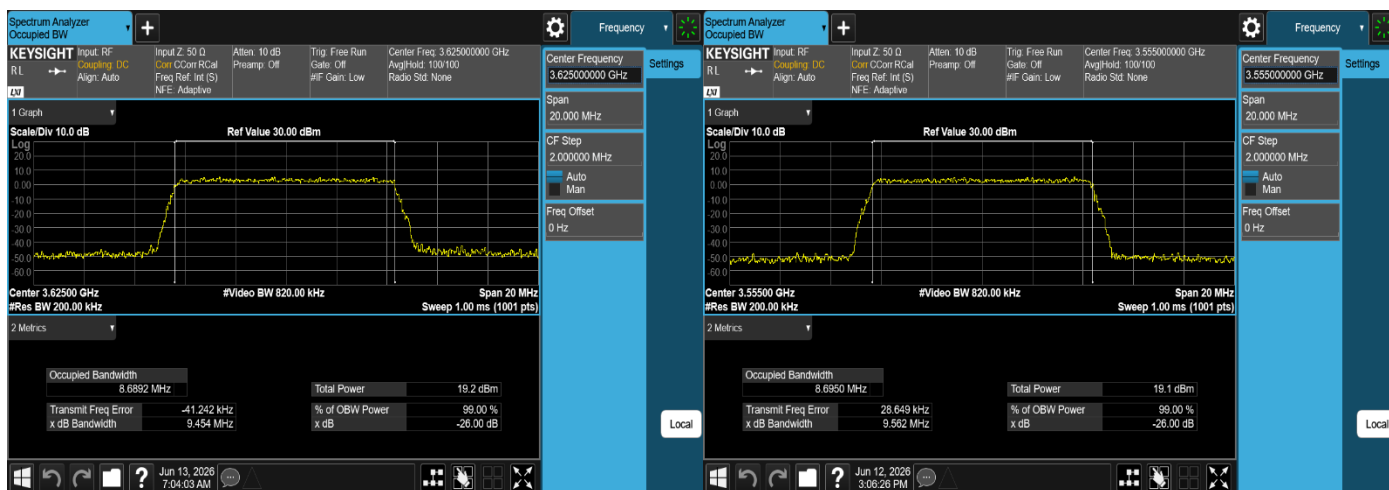
Table 8-5 OBW Test Result Table (NR_n48_3C_10M+20M+40M)



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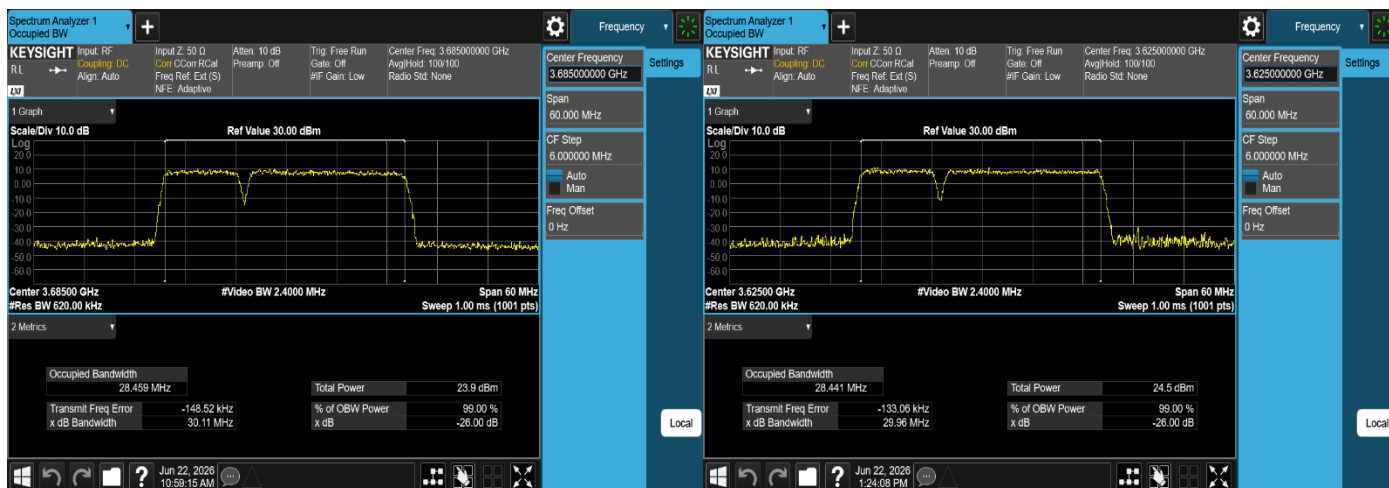
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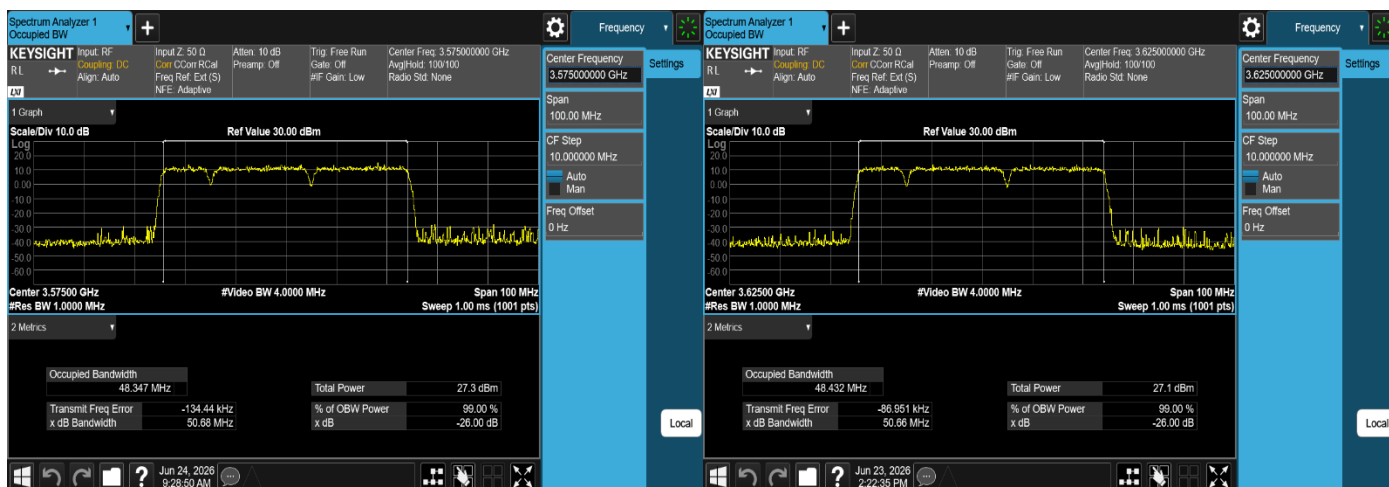
Plot 8-1. Occupied Bandwidth Plot
(NR_n48_1C_10M_QPSK - Middle Channel, Port 3)

Plot 8-2. Occupied Bandwidth Plot
(NR_n48_1C_10M_16QAM - Low Channel, Port 33)



Plot 8-3. Occupied Bandwidth Plot
(NR_n48_2C_10M+20M_QPSK - High Channel, Port 51)

Plot 8-4. Occupied Bandwidth Plot
(NR_n48_2C_10M+20M_16QAM - Middle Channel, Port 61)



Plot 8-5. Occupied Bandwidth Plot
(NR_n48_3C_10M+20M+20M_QPSK - Low Channel, Port 44)

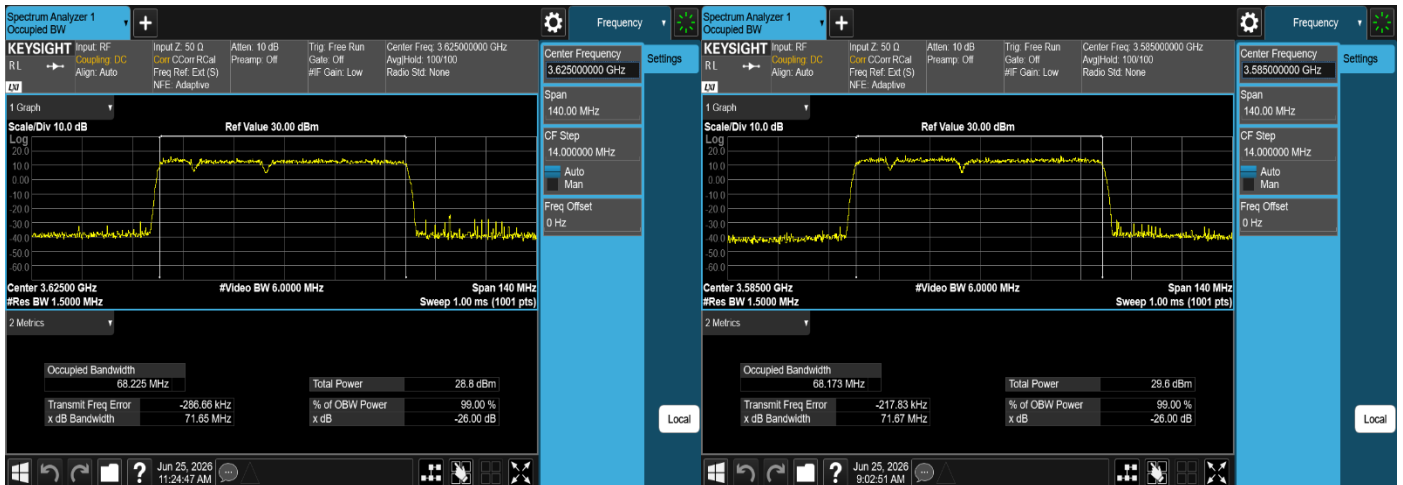
Plot 8-6. Occupied Bandwidth Plot
(NR_n48_3C_10M+20M+20M_16QAM - Middle Channel, Port 46)



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8.3 Equivalent Isotropically Radiated Power

Test Overview

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

Test Description

KDB 971168 D01 v03r01 – Section 5

KDB 662911 D01 v02r01 – Section E)1) In-Band Power Measurements

ANSI C63.26-2015 – Section 5.2.4.4

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

1. Conducted power measurements are performed using the signal analyzer's "channel power" measurement capability for signals with continuous operation.
2. Set span to $2 \times$ to $3 \times$ the OBW.
3. Set RBW = 1% to 5% of the OBW.
4. Set VBW $\geq 3 \times$ RBW.
5. Set Integration bandwidth = 10MHz (Reference bandwidth)
6. No. of sweep points $\geq 2 \times$ span / RBW
7. Detector = RMS
8. Set = auto-couple, or
Set $\geq [10 \times (\text{number of points in sweep}) \times (\text{transmission period})]$ for single sweep (automation-compatible) measurement. Transmission period is the on and off time of the transmitter.
9. A periodic trigger was used with the gating function turned ON. The gate sweep time, gate delay, and gate length were set accordingly to capture the ON time of the transmission.
10. The trace was allowed to stabilize.
11. The relevant equation for determining the maximum EIRP from the measured RF output power is given in Equation as follows:
$$\text{EIRP} = P_{\text{Meas}} + G_T$$

where
GT: gain of the transmitting antenna, in dBi (EIRP).

Test Setup

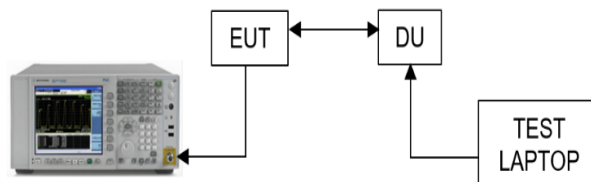


Figure 8-2. Test Instrument & Measurement Setup

Limit

§ 96.41 b

Maximum effective isotropic radiated power (EIRP) of any CBSD must comply with the limits

Device	Maximum EIRP (dBm/10megahertz)
Category B CBSD	47

Test Notes

1. A periodic trigger was used with the gating function turned ON. The gate sweep time, gate delay, and gate length were set accordingly to capture the ON time of the transmission.
2. For multi-carrier configurations, the conducted power for each carrier was measured to compare the first carrier's result with those of the second and third carriers. After the comparison, the worst measured value was recorded in the report.
3. Consider the following factors for MIMO:
The output power per each port is measured as dBm/MHz or dBm, the output powers are summed up in linear using the measure-and-sum technique defined in KDB 971168 D01 v03r01 - Section E) 2).
4. The output power per port (dBm/MHz or dBm) is converted to a linear value (mW). A summation of linear powers for all ports gives us the total MIMO Conducted Power (mW). We convert this back to logarithmic scale for further output power calculations.
5. Tested for Common beam mode to perform RF testing that can get maximum Tx power setting.

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6. Applied antenna gain per mode as below:

Output power per unit	NR_1C_10M			NR_2C_10M+20M		
	SU	MU	Common	SU	MU	Common
Tx Power Max (dBm)	21.8	18.8	30.9	26.6	23.6	35.6
Max Gain (dBi)	23.5	23.5	14.45	23.5	23.5	14.45
Beam EIRP Sum (dB)	0	3	0	0	3	0
Max EIRP (dBm)	45.3	45.3	45.3	50.1	50.1	50.1

Output power per unit	NR_3C_10M+20M+20M			NR_3C_10M+20M+40M		
	SU	MU	Common	SU	MU	Common
Tx Power Max (dBm)	28.8	25.8	37.9	30.2	27.2	39.3
Max Gain (dBi)	23.5	23.5	14.45	23.5	23.5	14.45
Beam EIRP Sum (dB)	0	3	0	0	3	0
Max EIRP (dBm)	52.3	52.3	52.3	53.7	53.7	53.7

7. Sample Calculation for NR_n48_1C_10M_QPSK - Low Channel:

Let us assume the following numbers:

- a) Total 64T MIMO Conducted Power linear sum as 1278.49 mW/10MHz
- b)

	Factors	Value	Unit
Summed MIMO Conducted Power (linear sum)		1278.49	mW/10MHz
Summed MIMO Conducted Power (dBm)	$= 10 * \log (1278.49) =$	31.07	dBm/10MHz
EIRP = $P_{Meas} + G_T$	$= 31.07 + 14.45 =$	45.52	dBm/10MHz

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Channel	Port	EIRP (dBm/10MHz)			
		QPSK	16QAM	64QAM	256QAM
Low	Port 0	13.08	13.00	12.94	13.51
	Port 1	12.87	12.74	13.24	12.72
	Port 2	13.03	13.00	13.20	12.92
	Port 3	12.78	13.03	12.85	13.49
	Port 4	13.11	13.24	13.42	13.06
	Port 5	12.98	12.91	13.11	12.76
	Port 6	12.67	13.08	12.82	13.02
	Port 7	12.96	13.19	13.01	12.59
	Port 8	12.56	12.91	12.67	12.95
	Port 9	12.80	12.72	12.95	12.60
	Port 10	12.72	12.96	12.85	13.48
	Port 11	12.92	13.08	12.96	12.49
	Port 12	12.78	13.14	13.11	12.66
	Port 13	12.84	12.68	12.96	12.56
	Port 14	12.89	13.06	13.01	12.54
	Port 15	12.81	13.02	12.90	13.59
	Port 16	13.15	12.82	13.16	12.75
	Port 17	13.42	13.13	13.41	13.14
	Port 18	12.96	13.13	12.89	12.55
	Port 19	13.11	12.68	13.06	12.57
	Port 20	13.08	12.81	13.10	12.68
	Port 21	12.88	13.02	12.97	13.49
	Port 22	12.80	13.01	12.73	12.94
	Port 23	12.95	12.92	12.87	13.46
	Port 24	12.84	12.92	12.88	13.37
	Port 25	13.19	12.86	13.16	12.71
	Port 26	13.06	13.08	13.01	12.59
	Port 27	13.25	12.81	13.07	12.80
	Port 28	13.34	12.90	13.34	12.89
	Port 29	13.31	12.89	13.24	12.84
	Port 30	12.91	12.97	12.92	12.53
	Port 31	13.08	12.71	13.09	12.63
	Port 32	12.79	13.05	12.96	12.95
	Port 33	12.89	13.22	12.98	12.90
	Port 34	12.98	12.76	13.21	12.74
	Port 35	12.81	12.92	12.71	12.70
	Port 36	13.33	13.39	13.54	12.88
	Port 37	13.18	13.01	13.35	12.69
	Port 38	12.91	13.20	13.02	13.77
	Port 39	12.88	12.84	13.02	12.87
	Port 40	12.60	13.01	12.73	13.07
	Port 41	13.48	13.48	13.62	13.19
	Port 42	12.64	12.97	12.87	13.10
	Port 43	13.16	12.89	13.30	12.76
	Port 44	13.35	13.14	13.59	13.07
	Port 45	12.74	13.08	12.95	13.70
	Port 46	13.00	12.80	13.24	12.74
	Port 47	12.88	13.16	13.09	13.77
	Port 48	12.75	13.24	13.05	13.73
	Port 49	13.39	13.23	13.42	13.07
	Port 50	13.23	12.98	13.36	12.88
	Port 51	13.31	13.08	13.57	13.04
	Port 52	13.14	12.90	13.44	12.78

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	Port 53	13.28	13.15	13.56	13.00
	Port 54	13.05	12.79	13.17	12.63
	Port 55	13.10	12.93	13.33	12.72
	Port 56	13.20	13.00	13.26	12.91
	Port 57	13.03	12.90	13.27	12.79
	Port 58	12.78	13.02	12.86	13.62
	Port 59	12.88	13.17	13.01	13.66
	Port 60	12.80	13.14	13.06	13.60
	Port 61	13.46	13.18	13.52	13.11
	Port 62	12.98	12.77	13.21	12.51
	Port 63	12.84	13.12	13.22	13.66
Total Output Power (mW/10MHz)		1278.49	1277.65	1313.30	1279.52
Total Output Power (dBm/10MHz)		31.07	31.06	31.18	31.07
Antenna Gain (dBi)		14.45	14.45	14.45	14.45
Total MIMO EIRP (dBm/10MHz)		45.52	45.51	45.63	45.52
EIRP Limit (dBm/10MHz)		47.00	47.00	47.00	47.00
Margin		-1.48	-1.49	-1.37	-1.48
Channel	Port	EIRP (dBm/10MHz)			
		QPSK	16QAM	64QAM	256QAM
Mid	Port 0	12.98	13.10	12.91	12.88
	Port 1	13.08	13.03	13.23	12.89
	Port 2	12.92	13.02	13.11	12.82
	Port 3	12.82	12.89	12.94	12.89
	Port 4	13.44	13.29	13.37	13.11
	Port 5	13.09	13.08	13.08	13.05
	Port 6	12.98	13.00	13.02	12.91
	Port 7	12.89	12.91	12.95	12.76
	Port 8	12.93	12.84	12.72	12.64
	Port 9	12.93	12.71	12.72	12.59
	Port 10	12.94	12.99	12.97	12.90
	Port 11	12.94	12.87	12.82	12.77
	Port 12	13.38	13.35	13.06	13.10
	Port 13	13.09	13.09	12.95	12.95
	Port 14	12.98	12.71	12.65	12.64
	Port 15	12.96	12.72	12.66	12.57
	Port 16	13.09	13.11	13.00	13.03
	Port 17	12.89	13.19	13.16	13.16
	Port 18	12.98	12.75	12.76	12.71
	Port 19	13.06	13.06	13.06	12.99
	Port 20	12.97	13.34	13.27	13.30
	Port 21	12.76	12.58	12.55	12.44
	Port 22	12.97	12.73	12.75	12.60
	Port 23	12.99	12.81	12.78	12.70
	Port 24	12.89	12.77	12.81	12.74
	Port 25	12.84	12.83	12.80	12.74
	Port 26	13.06	12.82	12.78	12.67
	Port 27	12.81	12.76	12.77	12.68
	Port 28	12.81	13.18	13.23	13.16
	Port 29	12.89	12.84	12.81	12.76
	Port 30	12.87	12.83	12.91	12.82
	Port 31	12.89	12.59	12.69	12.59
	Port 32	12.93	12.86	13.34	13.27
	Port 33	13.00	12.42	12.84	12.82
	Port 34	12.83	12.58	12.91	12.95
	Port 35	12.97	12.81	12.98	12.96

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	Port 36	12.89	13.38	13.55	13.60
	Port 37	12.79	13.32	13.54	13.50
	Port 38	12.85	12.60	12.88	12.93
	Port 39	12.85	12.47	12.68	12.68
	Port 40	12.97	12.71	12.60	12.60
	Port 41	12.90	13.64	13.51	13.58
	Port 42	13.07	12.98	12.93	13.11
	Port 43	13.25	13.25	13.19	13.21
	Port 44	13.21	13.40	13.50	13.50
	Port 45	12.90	12.86	12.85	12.87
	Port 46	13.02	13.04	12.96	12.99
	Port 47	12.98	13.00	12.92	12.88
	Port 48	13.05	13.00	12.98	13.02
	Port 49	13.05	13.51	13.51	13.53
	Port 50	13.17	13.07	13.11	13.05
	Port 51	12.83	13.54	13.49	13.52
	Port 52	12.82	13.46	13.43	13.62
	Port 53	12.96	12.92	12.95	12.83
	Port 54	13.18	13.12	13.05	13.03
	Port 55	13.16	13.17	13.16	13.18
	Port 56	13.36	13.31	13.35	13.50
	Port 57	13.06	13.06	13.06	13.01
	Port 58	12.99	12.95	12.90	12.91
	Port 59	13.06	12.99	13.03	13.00
	Port 60	13.03	13.04	13.04	12.97
	Port 61	12.83	13.57	13.54	13.44
	Port 62	12.98	12.89	12.90	12.89
	Port 63	12.99	12.92	13.00	12.88
Total Output Power (mW/10MHz)		1273.28	1277.79	1283.72	1272.44
Total Output Power (dBm/10MHz)		31.05	31.06	31.08	31.05
Antenna Gain (dBi)		14.45	14.45	14.45	14.45
Total MIMO EIRP (dBm/10MHz)		45.50	45.51	45.53	45.50
EIRP Limit (dBm/10MHz)		47.00	47.00	47.00	47.00
Margin		-1.50	-1.49	-1.47	-1.50
Channel	Port	EIRP (dBm/10MHz)			
		QPSK	16QAM	64QAM	256QAM
High	Port 0	12.73	12.98	12.79	12.85
	Port 1	12.98	13.28	12.92	13.10
	Port 2	12.99	13.24	12.88	13.11
	Port 3	12.90	13.12	12.84	12.86
	Port 4	13.43	13.72	13.30	13.39
	Port 5	13.05	13.29	12.88	12.84
	Port 6	13.04	13.29	12.90	12.90
	Port 7	13.05	13.24	12.90	12.85
	Port 8	12.81	13.14	12.89	12.73
	Port 9	12.93	13.16	12.73	12.75
	Port 10	13.04	13.28	12.85	12.79
	Port 11	13.09	13.27	12.89	12.88
	Port 12	13.19	13.40	13.10	13.03
	Port 13	12.93	13.09	12.81	12.76
	Port 14	12.96	13.11	12.85	12.85
	Port 15	12.89	13.05	12.91	12.73
	Port 16	13.40	13.54	13.19	13.20
	Port 17	13.20	13.38	13.02	13.04
	Port 18	12.96	13.09	12.96	12.75

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	Port 19	13.11	13.25	12.91	12.92
	Port 20	13.14	13.21	12.92	12.93
	Port 21	12.72	12.84	12.74	12.71
	Port 22	12.86	13.05	12.73	12.93
	Port 23	12.90	13.01	12.86	12.96
	Port 24	12.84	13.00	12.91	12.90
	Port 25	12.84	13.04	12.72	12.99
	Port 26	12.87	13.01	12.70	12.96
	Port 27	12.98	13.13	12.81	13.04
	Port 28	13.29	13.36	13.01	12.93
	Port 29	13.16	13.22	12.86	12.85
	Port 30	13.00	13.00	12.69	12.66
	Port 31	12.74	12.90	12.69	12.82
	Port 32	13.31	13.68	13.34	13.28
	Port 33	12.99	13.43	13.10	13.06
	Port 34	12.70	13.08	12.80	12.72
	Port 35	12.93	13.27	12.95	12.91
	Port 36	13.45	13.08	13.43	13.40
	Port 37	13.30	13.63	13.30	13.31
	Port 38	12.84	13.22	12.88	12.89
	Port 39	12.63	12.96	12.67	12.65
	Port 40	12.88	13.28	12.94	12.94
	Port 41	13.73	13.53	13.54	13.14
	Port 42	13.03	13.45	13.12	13.09
	Port 43	13.31	13.72	13.31	13.33
	Port 44	13.43	13.10	13.48	13.47
	Port 45	12.70	13.01	12.75	12.66
	Port 46	12.95	13.30	12.99	13.04
	Port 47	13.00	13.41	13.06	12.97
	Port 48	12.91	13.25	12.91	12.88
	Port 49	13.31	13.65	13.30	13.37
	Port 50	13.04	13.49	13.16	13.07
	Port 51	13.52	13.25	13.60	13.56
	Port 52	13.21	13.61	13.23	13.19
	Port 53	13.09	13.49	13.17	13.18
	Port 54	12.95	13.37	13.00	13.04
	Port 55	12.97	13.35	12.98	13.18
	Port 56	12.81	13.20	12.90	12.89
	Port 57	12.81	13.21	12.86	12.99
	Port 58	12.89	13.30	13.00	13.04
	Port 59	12.76	13.13	12.91	12.86
	Port 60	12.89	13.34	13.04	13.03
	Port 61	13.30	13.09	13.46	13.46
	Port 62	12.71	13.22	12.83	12.87
	Port 63	12.78	13.25	12.84	12.96
Total Output Power (mW/10MHz)		1284.05	1354.33	1274.13	1275.94
Total Output Power (dBm/10MHz)		31.09	31.32	31.05	31.06
Antenna Gain (dBi)		14.45	14.45	14.45	14.45
Total MIMO EIRP (dBm/10MHz)		45.54	45.77	45.50	45.51
EIRP Limit (dBm/10MHz)		47.00	47.00	47.00	47.00
Margin		-1.46	-1.23	-1.50	-1.49

Table 8-6 EIRP Test Result Table (NR_n48_1C_10M)

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Channel	Port	EIRP (dBm/10MHz)	
		QPSK	16QAM
Low	Port 0	12.84	13.17
	Port 1	13.10	13.42
	Port 2	13.13	13.21
	Port 3	12.87	13.02
	Port 4	13.33	13.57
	Port 5	13.18	13.38
	Port 6	12.92	13.20
	Port 7	12.83	13.20
	Port 8	12.65	12.90
	Port 9	12.91	13.20
	Port 10	13.02	13.37
	Port 11	13.04	13.20
	Port 12	13.07	13.30
	Port 13	12.91	13.26
	Port 14	12.78	13.12
	Port 15	12.93	13.02
	Port 16	13.02	13.37
	Port 17	13.24	13.58
	Port 18	12.79	13.04
	Port 19	13.10	13.37
	Port 20	12.88	13.20
	Port 21	12.81	13.05
	Port 22	12.87	13.32
	Port 23	12.85	13.13
	Port 24	12.91	13.22
	Port 25	13.00	13.37
	Port 26	12.98	13.16
	Port 27	12.97	13.43
	Port 28	13.33	13.72
	Port 29	13.25	13.42
	Port 30	12.79	13.14
	Port 31	12.91	13.27
	Port 32	13.00	13.41
	Port 33	13.21	13.53
	Port 34	13.25	13.48
	Port 35	12.82	13.25
	Port 36	13.58	13.40
	Port 37	13.40	13.46
	Port 38	13.10	13.46
	Port 39	12.82	13.11
	Port 40	12.63	13.05
	Port 41	13.59	13.61
	Port 42	13.21	13.66
	Port 43	13.32	13.70
	Port 44	13.56	13.64
	Port 45	12.89	13.47
	Port 46	13.35	13.84
	Port 47	12.93	13.46
	Port 48	13.05	13.59
	Port 49	13.55	13.58
	Port 50	13.22	13.75
	Port 51	13.54	13.55
	Port 52	13.28	13.46

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	Port 53	13.40	13.42
	Port 54	13.17	13.71
	Port 55	13.38	13.37
	Port 56	13.40	13.42
	Port 57	13.28	13.65
	Port 58	13.14	13.67
	Port 59	12.99	13.41
	Port 60	13.08	13.56
	Port 61	13.84	13.73
	Port 62	13.31	13.28
	Port 63	12.98	13.55
Total Output Power (mW/10MHz)		1310.86	1396.63
Total Output Power (dBm/10MHz)		31.18	31.45
Antenna Gain (dBi)		14.45	14.45
Total MIMO EIRP (dBm/10MHz)		45.63	45.90
EIRP Limit (dBm/10MHz)		47.00	47.00
Margin		-1.37	-1.10
Channel	Port	EIRP (dBm/10MHz)	
		QPSK	16QAM
Mid	Port 0	13.01	12.94
	Port 1	13.07	13.29
	Port 2	12.99	12.86
	Port 3	12.81	12.70
	Port 4	13.27	13.20
	Port 5	13.11	13.08
	Port 6	13.04	12.94
	Port 7	12.87	12.77
	Port 8	12.79	12.62
	Port 9	12.76	12.84
	Port 10	12.95	12.76
	Port 11	12.95	12.81
	Port 12	13.19	13.17
	Port 13	13.10	13.10
	Port 14	12.88	12.79
	Port 15	12.78	12.50
	Port 16	13.13	13.00
	Port 17	13.21	13.08
	Port 18	12.88	12.61
	Port 19	13.04	12.83
	Port 20	13.43	13.53
	Port 21	12.59	12.46
	Port 22	12.78	12.68
	Port 23	12.81	12.71
	Port 24	12.91	12.83
	Port 25	12.98	12.85
	Port 26	12.81	12.70
	Port 27	12.86	12.85
	Port 28	13.38	13.19
	Port 29	12.93	12.75
	Port 30	12.90	12.81
	Port 31	12.72	12.61
	Port 32	13.33	13.39
	Port 33	12.87	12.99
	Port 34	12.98	12.74
	Port 35	13.15	12.91



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	Port 36	13.71	13.56
	Port 37	13.61	13.55
	Port 38	13.03	12.74
	Port 39	12.70	12.37
	Port 40	12.86	12.62
	Port 41	13.80	13.67
	Port 42	13.21	12.91
	Port 43	13.43	13.05
	Port 44	13.84	13.84
	Port 45	13.07	12.95
	Port 46	13.08	12.76
	Port 47	13.07	12.81
	Port 48	13.25	12.92
	Port 49	13.72	13.43
	Port 50	13.32	13.02
	Port 51	13.70	13.39
	Port 52	13.87	13.52
	Port 53	13.08	12.76
	Port 54	13.33	13.02
	Port 55	13.38	13.00
	Port 56	13.73	13.27
	Port 57	13.49	12.92
	Port 58	13.41	12.88
	Port 59	13.35	12.86
	Port 60	13.37	12.89
	Port 61	13.96	13.43
	Port 62	13.41	12.78
	Port 63	13.42	12.78
Total Output Power (mW/10MHz)		1329.76	1269.15
Total Output Power (dBm/10MHz)		31.24	31.04
Antenna Gain (dBi)		14.45	14.45
Total MIMO EIRP (dBm/10MHz)		45.69	45.49
EIRP Limit (dBm/10MHz)		47.00	47.00
Margin		-1.31	-1.51
Channel	Port	EIRP (dBm/10MHz)	
		QPSK	16QAM
High	Port 0	13.23	12.78
	Port 1	13.08	13.20
	Port 2	13.36	13.13
	Port 3	13.03	13.04
	Port 4	13.70	13.50
	Port 5	13.19	12.97
	Port 6	13.30	13.23
	Port 7	13.26	13.09
	Port 8	13.20	12.87
	Port 9	13.10	13.00
	Port 10	13.06	13.11
	Port 11	13.29	13.07
	Port 12	13.36	13.28
	Port 13	13.19	12.96
	Port 14	13.20	12.96
	Port 15	13.11	13.14
	Port 16	13.35	13.49
	Port 17	13.48	13.44
	Port 18	13.21	13.10



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	Port 19	13.44	13.50
	Port 20	13.23	13.27
	Port 21	13.00	12.94
	Port 22	13.22	13.17
	Port 23	13.15	13.05
	Port 24	12.98	13.07
	Port 25	13.21	13.04
	Port 26	13.26	13.00
	Port 27	13.25	12.95
	Port 28	13.45	13.45
	Port 29	13.41	13.17
	Port 30	13.27	13.08
	Port 31	13.02	12.77
	Port 32	13.83	13.77
	Port 33	13.22	13.51
	Port 34	12.87	13.12
	Port 35	13.28	13.56
	Port 36	13.86	13.94
	Port 37	13.58	13.85
	Port 38	13.17	13.39
	Port 39	12.98	12.99
	Port 40	13.06	13.23
	Port 41	13.92	13.83
	Port 42	13.35	13.36
	Port 43	13.84	13.72
	Port 44	13.75	13.51
	Port 45	13.15	13.27
	Port 46	13.49	13.21
	Port 47	13.41	13.45
	Port 48	13.26	13.41
	Port 49	13.86	13.67
	Port 50	13.61	13.61
	Port 51	13.94	13.86
	Port 52	13.74	13.71
	Port 53	13.57	13.44
	Port 54	13.47	13.48
	Port 55	13.48	13.39
	Port 56	13.49	13.40
	Port 57	13.47	12.93
	Port 58	13.52	13.39
	Port 59	13.37	13.19
	Port 60	13.18	13.33
	Port 61	13.98	13.78
	Port 62	13.27	13.21
	Port 63	13.33	13.12
Total Output Power (mW/10MHz)		1389.15	1367.57
Total Output Power (dBm/10MHz)		31.43	31.36
Antenna Gain (dBi)		14.45	14.45
Total MIMO EIRP (dBm/10MHz)		45.88	45.81
EIRP Limit (dBm/10MHz)		47.00	47.00
Margin		-1.12	-1.19

Table 8-7 EIRP Test Result Table (NR_n48_2C_10M+20M)

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Channel	Port	EIRP (dBm/10MHz)	
		QPSK	16QAM
Low	Port 0	13.05	13.31
	Port 1	13.33	13.65
	Port 2	13.30	13.39
	Port 3	12.96	13.21
	Port 4	13.58	13.50
	Port 5	13.28	13.59
	Port 6	13.14	13.36
	Port 7	13.08	13.40
	Port 8	12.85	13.04
	Port 9	13.10	13.33
	Port 10	13.27	13.51
	Port 11	13.07	13.35
	Port 12	13.20	13.47
	Port 13	13.15	13.39
	Port 14	13.04	13.34
	Port 15	12.87	13.14
	Port 16	13.30	13.52
	Port 17	13.53	13.74
	Port 18	12.97	13.13
	Port 19	13.15	13.48
	Port 20	13.14	13.46
	Port 21	12.92	13.22
	Port 22	13.07	13.42
	Port 23	12.94	13.18
	Port 24	13.11	13.32
	Port 25	13.16	13.44
	Port 26	13.05	13.22
	Port 27	13.09	13.40
	Port 28	13.54	13.78
	Port 29	13.29	13.45
	Port 30	12.96	13.19
	Port 31	12.97	13.14
	Port 32	13.51	13.72
	Port 33	13.40	13.58
	Port 34	13.28	13.58
	Port 35	13.09	13.30
	Port 36	13.93	13.21
	Port 37	13.71	13.62
	Port 38	13.35	13.53
	Port 39	12.94	13.14
	Port 40	12.87	13.13
	Port 41	13.72	13.54
	Port 42	13.48	13.75
	Port 43	13.47	13.74
	Port 44	13.51	13.79
	Port 45	13.18	13.41
	Port 46	13.56	13.44
	Port 47	13.19	13.40
	Port 48	13.37	13.61
	Port 49	13.84	13.23
	Port 50	13.46	13.70
	Port 51	13.76	13.72
	Port 52	13.71	13.64

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	Port 53	13.63	13.81
	Port 54	13.38	13.62
	Port 55	13.57	13.79
	Port 56	13.12	13.97
	Port 57	12.93	13.68
	Port 58	12.91	13.66
	Port 59	12.66	13.31
	Port 60	12.86	13.62
	Port 61	13.45	13.36
	Port 62	12.60	13.27
	Port 63	12.89	13.59
	Total Output Power (mW/10MHz)	1351.06	1421.78
Total Output Power (dBm/10MHz)		31.31	31.53
Antenna Gain (dBi)		14.45	14.45
Total MIMO EIRP (dBm/10MHz)		45.76	45.98
EIRP Limit (dBm/10MHz)		47.00	47.00
Margin		-1.24	-1.02
Channel	Port	EIRP (dBm/10MHz)	
		QPSK	16QAM
Mid	Port 0	13.46	13.15
	Port 1	13.55	13.42
	Port 2	13.47	13.12
	Port 3	13.38	12.86
	Port 4	13.10	13.49
	Port 5	13.56	13.13
	Port 6	13.58	13.09
	Port 7	13.46	13.04
	Port 8	13.37	12.81
	Port 9	13.34	12.96
	Port 10	13.57	13.06
	Port 11	13.44	13.03
	Port 12	13.06	13.31
	Port 13	13.55	13.25
	Port 14	13.38	13.01
	Port 15	13.35	12.83
	Port 16	13.02	13.16
	Port 17	12.92	13.29
	Port 18	13.40	12.96
	Port 19	13.60	13.20
	Port 20	13.00	13.32
	Port 21	13.11	12.62
	Port 22	13.37	12.94
	Port 23	13.29	12.89
	Port 24	13.38	13.00
	Port 25	13.39	13.06
	Port 26	13.41	12.84
	Port 27	13.46	13.22
	Port 28	13.08	13.38
	Port 29	13.42	12.89
	Port 30	13.38	13.01
	Port 31	13.09	12.83
	Port 32	13.47	13.56
	Port 33	13.24	13.11
	Port 34	13.51	13.10
	Port 35	13.65	13.23



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	Port 36	13.66	13.89
	Port 37	13.54	13.71
	Port 38	13.51	13.27
	Port 39	13.30	12.90
	Port 40	13.47	12.67
	Port 41	13.36	13.73
	Port 42	13.65	13.19
	Port 43	12.95	13.37
	Port 44	13.20	13.66
	Port 45	13.49	13.07
	Port 46	13.52	13.23
	Port 47	13.51	13.04
	Port 48	13.57	13.16
	Port 49	13.58	13.71
	Port 50	13.22	13.42
	Port 51	13.57	13.88
	Port 52	13.65	13.69
	Port 53	13.59	13.12
	Port 54	13.32	13.46
	Port 55	13.09	13.40
	Port 56	13.33	13.61
	Port 57	13.66	13.28
	Port 58	13.57	13.17
	Port 59	13.55	13.29
	Port 60	13.47	13.12
	Port 61	13.52	13.80
	Port 62	13.53	12.99
	Port 63	13.52	13.14
Total Output Power (mW/10MHz)		1402.04	1341.80
Total Output Power (dBm/10MHz)		31.47	31.28
Antenna Gain (dBi)		14.45	14.45
Total MIMO EIRP (dBm/10MHz)		45.92	45.73
EIRP Limit (dBm/10MHz)		47.00	47.00
Margin		-1.08	-1.27
Channel	Port	EIRP (dBm/10MHz)	
		QPSK	16QAM
High	Port 0	13.01	13.33
	Port 1	13.21	13.37
	Port 2	13.13	13.28
	Port 3	12.97	13.22
	Port 4	13.54	13.95
	Port 5	13.26	13.32
	Port 6	12.78	13.31
	Port 7	12.91	13.32
	Port 8	12.99	13.41
	Port 9	12.94	13.35
	Port 10	12.84	13.28
	Port 11	13.05	13.45
	Port 12	13.25	13.65
	Port 13	13.55	13.29
	Port 14	13.02	13.32
	Port 15	13.41	13.26
	Port 16	13.15	13.54
	Port 17	12.99	13.59
	Port 18	12.65	13.28



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	Port 19	13.15	13.42
	Port 20	12.94	13.47
	Port 21	12.63	13.06
	Port 22	12.83	13.27
	Port 23	12.78	13.14
	Port 24	12.72	13.13
	Port 25	12.82	13.20
	Port 26	12.63	13.18
	Port 27	12.70	13.22
	Port 28	13.12	13.62
	Port 29	12.74	13.18
	Port 30	12.84	13.19
	Port 31	12.61	12.93
	Port 32	13.46	13.83
	Port 33	12.65	13.31
	Port 34	12.67	13.14
	Port 35	12.76	13.49
	Port 36	13.47	13.13
	Port 37	13.24	13.80
	Port 38	12.81	13.38
	Port 39	12.48	13.10
	Port 40	12.50	13.22
	Port 41	13.83	13.62
	Port 42	12.92	13.60
	Port 43	13.39	13.94
	Port 44	13.33	13.97
	Port 45	12.79	13.27
	Port 46	12.92	13.36
	Port 47	12.86	13.47
	Port 48	12.68	13.48
	Port 49	13.68	13.63
	Port 50	13.44	13.67
	Port 51	13.51	13.93
	Port 52	13.49	13.87
	Port 53	13.19	13.56
	Port 54	13.40	13.55
	Port 55	12.94	13.53
	Port 56	12.29	13.63
	Port 57	12.04	13.52
	Port 58	12.23	13.44
	Port 59	12.62	13.39
	Port 60	12.08	13.31
	Port 61	12.38	13.92
	Port 62	12.39	13.28
	Port 63	13.40	13.39
Total Output Power (mW/10MHz)		1268.30	1410.74
Total Output Power (dBm/10MHz)		31.03	31.49
Antenna Gain (dBi)		14.45	14.45
Total MIMO EIRP (dBm/10MHz)		45.48	45.94
EIRP Limit (dBm/10MHz)		47.00	47.00
Margin		-1.52	-1.06

Table 8-8 EIRP Test Result Table (NR_n48_3C_10M+20M+20M)

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Channel	Port	EIRP (dBm/10MHz)	
		QPSK	16QAM
Low	Port 0	13.00	13.49
	Port 1	13.25	13.29
	Port 2	13.33	13.58
	Port 3	12.93	13.35
	Port 4	13.49	13.41
	Port 5	13.21	13.71
	Port 6	13.06	13.60
	Port 7	13.07	13.50
	Port 8	12.84	13.26
	Port 9	13.06	13.45
	Port 10	13.28	13.22
	Port 11	13.06	13.63
	Port 12	13.17	13.60
	Port 13	13.11	13.57
	Port 14	13.11	13.61
	Port 15	12.97	13.31
	Port 16	13.30	13.33
	Port 17	13.51	13.32
	Port 18	13.08	13.25
	Port 19	13.23	13.56
	Port 20	13.17	13.58
	Port 21	13.00	13.49
	Port 22	13.09	13.53
	Port 23	12.95	13.29
	Port 24	13.08	13.50
	Port 25	13.14	13.25
	Port 26	13.06	13.35
	Port 27	13.24	13.52
	Port 28	13.58	13.38
	Port 29	13.41	13.15
	Port 30	12.94	13.23
	Port 31	13.06	13.35
	Port 32	13.33	13.59
	Port 33	13.30	13.25
	Port 34	13.39	13.34
	Port 35	13.09	13.52
	Port 36	13.94	13.68
	Port 37	13.63	13.68
	Port 38	13.33	13.20
	Port 39	13.16	13.23
	Port 40	12.94	13.22
	Port 41	13.82	13.74
	Port 42	13.50	13.28
	Port 43	13.49	13.33
	Port 44	13.52	13.32
	Port 45	13.20	13.59
	Port 46	13.59	13.41
	Port 47	13.12	13.52
	Port 48	13.37	13.06
	Port 49	13.81	13.82
	Port 50	13.57	13.58
	Port 51	13.67	13.63
	Port 52	13.69	13.59

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	Port 53	13.65	13.63
	Port 54	13.43	13.67
	Port 55	13.54	13.45
	Port 56	13.73	13.65
	Port 57	13.37	13.38
	Port 58	13.33	13.56
	Port 59	13.19	13.44
	Port 60	13.36	13.40
	Port 61	13.96	13.50
	Port 62	13.18	13.38
	Port 63	13.32	13.66
Total Output Power (mW/10MHz)		1373.71	1418.23
Total Output Power (dBm/10MHz)		31.38	31.52
Antenna Gain (dBi)		14.45	14.45
Total MIMO EIRP (dBm/10MHz)		45.83	45.97
EIRP Limit (dBm/10MHz)		47.00	47.00
Margin		-1.17	-1.03
Channel	Port	EIRP (dBm/10MHz)	
		QPSK	16QAM
Mid	Port 0	13.11	13.02
	Port 1	13.28	13.23
	Port 2	13.19	13.09
	Port 3	12.85	12.84
	Port 4	13.39	13.42
	Port 5	12.87	12.98
	Port 6	13.07	12.98
	Port 7	12.94	12.93
	Port 8	12.68	12.70
	Port 9	12.83	12.89
	Port 10	13.10	13.14
	Port 11	13.05	13.01
	Port 12	12.98	13.13
	Port 13	13.08	13.06
	Port 14	12.86	12.90
	Port 15	12.82	12.78
	Port 16	13.08	13.23
	Port 17	13.31	13.41
	Port 18	12.82	12.79
	Port 19	13.01	13.09
	Port 20	13.10	13.25
	Port 21	12.62	12.61
	Port 22	13.12	13.00
	Port 23	12.68	12.75
	Port 24	12.96	13.07
	Port 25	13.05	13.06
	Port 26	13.00	12.95
	Port 27	13.02	13.10
	Port 28	13.31	13.32
	Port 29	13.07	13.01
	Port 30	12.80	12.87
	Port 31	12.66	12.84
	Port 32	13.35	13.54
	Port 33	13.16	13.21
	Port 34	13.14	13.06
	Port 35	13.01	13.09



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	Port 36	13.66	13.74
	Port 37	13.73	13.66
	Port 38	13.09	13.07
	Port 39	12.79	12.82
	Port 40	12.71	12.71
	Port 41	13.62	13.59
	Port 42	13.24	13.26
	Port 43	13.29	13.28
	Port 44	13.40	13.48
	Port 45	13.04	13.00
	Port 46	13.30	13.33
	Port 47	12.98	13.04
	Port 48	13.18	13.12
	Port 49	13.80	13.80
	Port 50	13.34	13.26
	Port 51	13.65	13.68
	Port 52	13.63	13.66
	Port 53	13.33	13.20
	Port 54	13.37	13.38
	Port 55	13.44	13.42
	Port 56	13.42	13.40
	Port 57	13.24	13.20
	Port 58	13.22	13.15
	Port 59	13.09	13.08
	Port 60	13.10	13.07
	Port 61	13.76	13.69
	Port 62	13.04	13.04
	Port 63	13.11	13.05
Total Output Power (mW/10MHz)		1321.43	1324.14
Total Output Power (dBm/10MHz)		31.21	31.22
Antenna Gain (dBi)		14.45	14.45
Total MIMO EIRP (dBm/10MHz)		45.66	45.67
EIRP Limit (dBm/10MHz)		47.00	47.00
Margin		-1.34	-1.33
Channel	Port	EIRP (dBm/10MHz)	
		QPSK	16QAM
High	Port 0	12.60	12.59
	Port 1	12.79	12.79
	Port 2	12.87	12.80
	Port 3	12.56	12.65
	Port 4	13.20	13.28
	Port 5	12.66	12.84
	Port 6	12.81	12.74
	Port 7	12.77	12.78
	Port 8	12.76	12.75
	Port 9	12.66	12.76
	Port 10	12.72	12.87
	Port 11	12.88	12.90
	Port 12	12.96	13.23
	Port 13	12.66	12.78
	Port 14	12.73	12.76
	Port 15	12.66	12.64
	Port 16	13.04	12.89
	Port 17	12.98	13.05
	Port 18	12.74	12.73



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	Port 19	12.99	12.75
	Port 20	12.96	13.17
	Port 21	12.51	12.44
	Port 22	12.65	12.58
	Port 23	12.54	12.54
	Port 24	12.54	12.67
	Port 25	12.65	12.65
	Port 26	12.58	12.70
	Port 27	12.62	12.83
	Port 28	13.02	13.26
	Port 29	12.78	12.63
	Port 30	12.64	12.59
	Port 31	12.40	12.33
	Port 32	13.25	13.09
	Port 33	12.82	12.55
	Port 34	12.62	12.60
	Port 35	12.92	13.15
	Port 36	13.46	13.50
	Port 37	13.22	13.28
	Port 38	12.84	12.83
	Port 39	12.50	12.66
	Port 40	12.81	12.63
	Port 41	13.68	13.65
	Port 42	13.03	12.97
	Port 43	13.34	13.11
	Port 44	13.25	13.30
	Port 45	12.66	12.72
	Port 46	12.83	12.88
	Port 47	12.93	12.84
	Port 48	12.96	12.88
	Port 49	13.33	13.45
	Port 50	13.15	13.05
	Port 51	13.44	13.49
	Port 52	13.37	13.45
	Port 53	13.07	12.89
	Port 54	13.12	13.06
	Port 55	13.01	12.99
	Port 56	13.05	13.21
	Port 57	12.88	12.94
	Port 58	12.89	12.82
	Port 59	12.80	12.72
	Port 60	12.90	12.80
	Port 61	13.31	13.35
	Port 62	12.80	12.77
	Port 63	12.83	12.64
Total Output Power (mW/10MHz)		1247.64	1249.01
Total Output Power (dBm/10MHz)		30.96	30.97
Antenna Gain (dBi)		14.45	14.45
Total MIMO EIRP (dBm/10MHz)		45.41	45.42
EIRP Limit (dBm/10MHz)		47.00	47.00
Margin		-1.59	-1.58

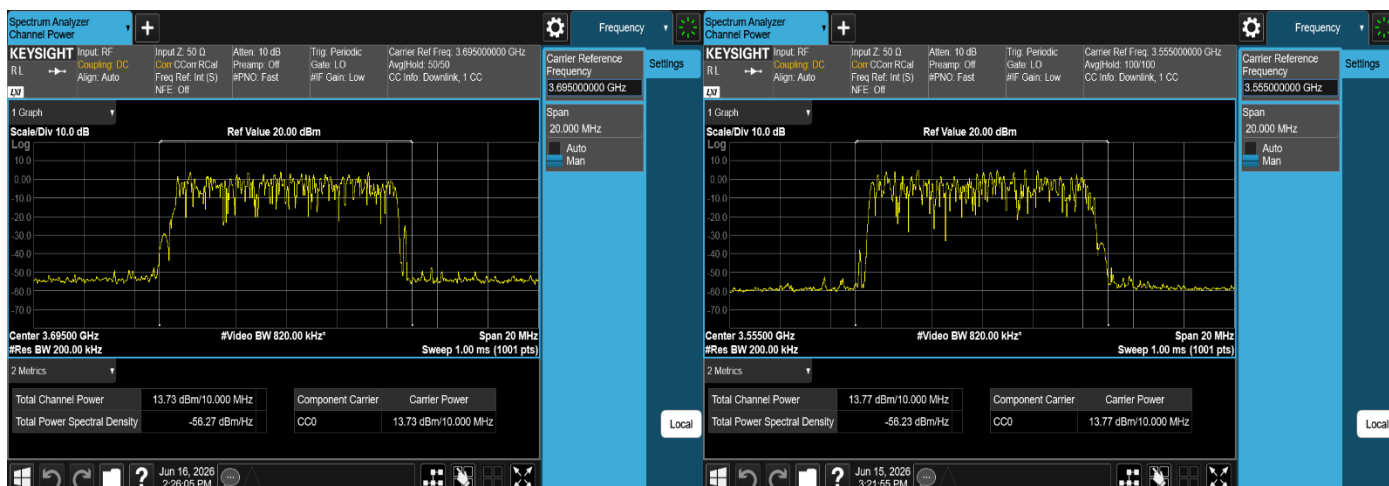
Table 8-9 EIRP Test Result Table (NR_n48_3C_10M+20M+40M)



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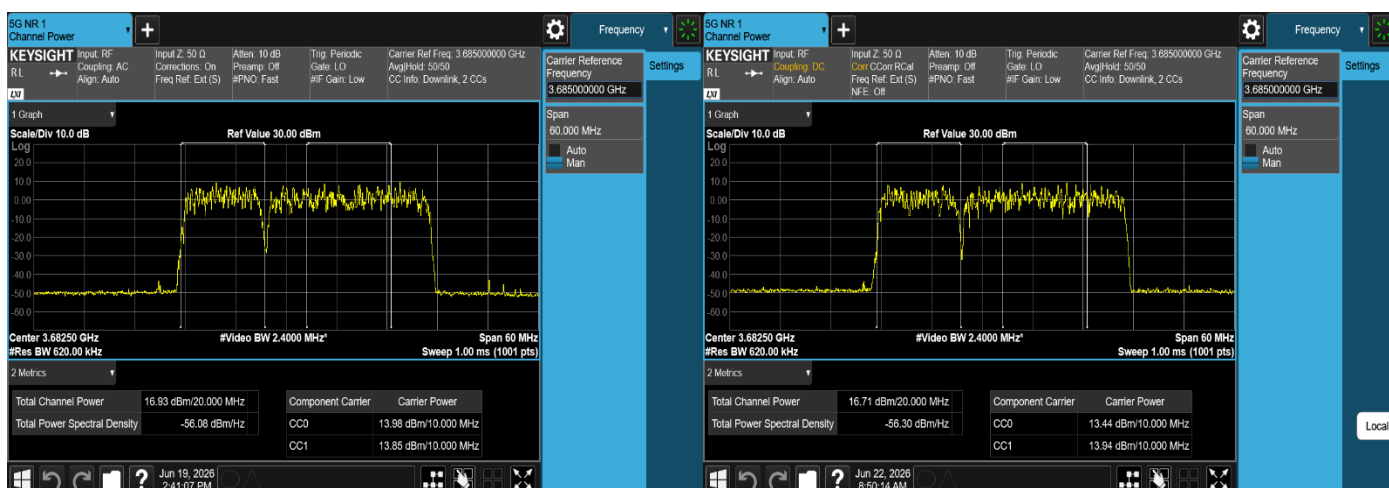
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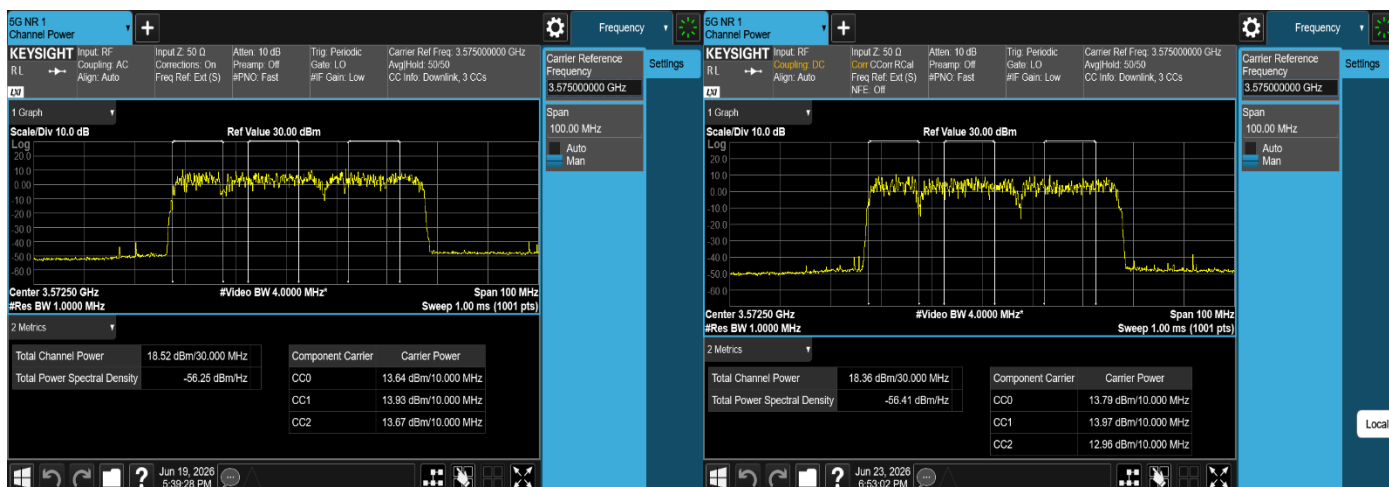
Plot 8-9. Equivalent Isotropically Radiated Power Plot
(NR_n48_1C_10M_QPSK - High Channel, Port 41)

Plot 8-10. Equivalent Isotropically Radiated Power Plot
(NR_n48_1C_10M_256QAM - Low Channel, Port 38)



Plot 8-11. Equivalent Isotropically Radiated Power Plot
(NR_n48_2C_10M+20M_QPSK - High Channel, Port 61)

Plot 8-12. Equivalent Isotropically Radiated Power Plot
(NR_n48_2C_10M+20M_16QAM - High Channel, Port 36)



Plot 8-13. Equivalent Isotropically Radiated Power Plot
(NR_n48_3C_10M+20M+20M_QPSK - Low Channel, Port 36)

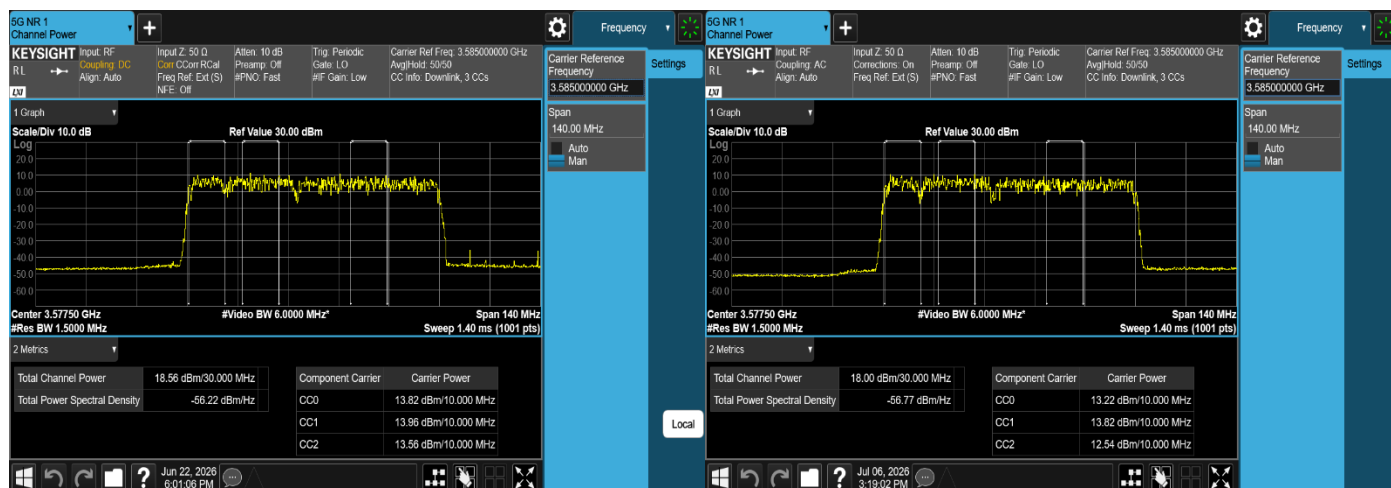
Plot 8-14. Equivalent Isotropically Radiated Power Plot
(NR_n48_3C_10M+20M+20M_16QAM - Low Channel, Port 56)



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8.4 Power Spectral Density (PSD)

Test Overview

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

Test Description

KDB 971168 D01 v03r01 – Section 5

KDB 662911 D01 v02r01 – Section E)1) In-Band Power Measurements

ANSI C63.26-2015 – Section 5.2.4.5

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

1. Conducted power measurements are performed using the signal analyzer's "SA" measurement capability for signals with continuous operation.
2. Set span to $2 \times$ to $3 \times$ the OBW.
3. Set RBW = 1 MHz (the reference bandwidth)
4. Set VBW $\geq 3 \times$ RBW.
5. Set number of measurement points in sweep $\geq 2 \times$ span / RBW.
6. Sweep time:
 - a) Set $\geq$ auto-couple, and enable trace averaging, or
 - b) Set $\geq [10 \times (\text{number of points in sweep}) \times (\text{transmission symbol period})]$ and enable a single sweep (automation-compatible) measurement. The sweep time should never be faster than the auto-coupled sweep time.
7. Detector = power averaging (rms).
8. The trace was allowed to stabilize
9. Use the peak marker function to determine the maximum amplitude level. ($=P_{\text{Meas}}$)
10. The relevant equation for determining the maximum EIRP from the measured RF output power is given in Equation as follows:

$$\text{EIRP} = P_{\text{Meas}} + G_T$$
 where
 G_T : gain of the transmitting antenna, in dBi (EIRP).

Test Setup

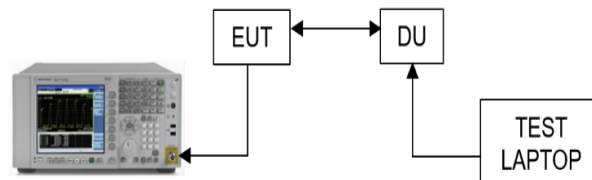


Figure 8-3. Test Instrument & Measurement Setup

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Limit**§ 96.41 b**

Maximum effective isotropic radiated power (EIRP) of any CBSD must comply with the limits

Device	Maximum PSD (dBm/MHz)
Category B CBSD	37

Test Notes

1. A periodic trigger was used with the gating function turned ON. The gate sweep time, gate delay, and gate length were set accordingly to capture the ON time of the transmission.
2. For multi-carrier configurations, the conducted power for each carrier was measured to compare the first carrier's result with those of the second and third carriers. After the comparison, the worst measured value was recorded in the report.
3. Consider the following factors for MIMO:
The output power per each port is measured as dBm/MHz or dBm, the output powers are summed up in linear using the measure-and-sum technique defined in KDB 971168 D01 v03r01 - Section E) 2).
4. The output power per port (dBm/MHz or dBm) is converted to a linear value (mW). A summation of linear powers for all ports gives us the total MIMO Conducted Power (mW). We convert this back to logarithmic scale for further output power calculations.
5. Tested for Common beam mode to perform RF testing that can get maximum Tx power setting.
6. Applied antenna gain per mode as below:

Output power per unit	NR_1C_10M			NR_2C_10M+20M		
	SU	MU	Common	SU	MU	Common
Tx Power Max (dBm)	21.8	18.8	30.9	26.6	23.6	35.6
Max Gain (dBi)	23.5	23.5	14.45	23.5	23.5	14.45
Beam EIRP Sum (dB)	0	3	0	0	3	0
Max EIRP (dBm)	45.3	45.3	45.3	50.1	50.1	50.1

Output power per unit	NR_3C_10M+20M+20M			NR_3C_10M+20M+40M		
	SU	MU	Common	SU	MU	Common
Tx Power Max (dBm)	28.8	25.8	37.9	30.2	27.2	39.3
Max Gain (dBi)	23.5	23.5	14.45	23.5	23.5	14.45
Beam EIRP Sum (dB)	0	3	0	0	3	0
Max EIRP (dBm)	52.3	52.3	52.3	53.7	53.7	53.7

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7. Sample Calculation for NR_n48_1C_10M_QPSK - Low Channel:

Let us assume the following numbers:

- a) Total 64T MIMO Conducted PSD linear sum as 152.47 mW/MHz
- b)

Factors		Value	Unit
Summed MIMO Conducted Power (linear sum)		152.47	mW/MHz
Summed MIMO Conducted Power (dBm)	$= 10 * \log (152.47) =$	21.83	dBm/MHz
EIRP = $P_{Meas} + G_T$	$= 21.83 + 14.45 =$	36.28	dBm/MHz

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Channel	Port	Power Spectral Density (dBm/MHz)			
		QPSK	16QAM	64QAM	256QAM
Low	Port 0	3.69	3.46	3.67	3.68
	Port 1	3.86	3.57	3.99	3.24
	Port 2	4.01	3.80	3.98	3.48
	Port 3	3.57	3.27	3.59	3.67
	Port 4	4.09	4.00	4.16	3.60
	Port 5	3.84	3.64	3.83	3.25
	Port 6	3.49	3.83	3.56	3.58
	Port 7	3.74	3.46	3.76	3.14
	Port 8	3.53	3.67	3.46	3.58
	Port 9	3.73	3.49	3.69	3.15
	Port 10	3.52	3.40	3.71	3.67
	Port 11	3.66	3.42	3.71	3.15
	Port 12	3.67	3.41	3.86	3.23
	Port 13	3.69	3.44	3.69	3.14
	Port 14	3.67	3.55	3.75	3.15
	Port 15	3.56	3.31	3.65	3.77
	Port 16	3.92	3.57	3.90	3.33
	Port 17	4.14	3.88	4.14	3.72
	Port 18	3.69	3.38	3.63	3.17
	Port 19	3.72	3.46	3.80	3.17
	Port 20	3.76	3.61	3.88	3.29
	Port 21	3.58	3.40	3.72	3.65
	Port 22	3.49	3.76	3.45	3.52
	Port 23	3.54	3.32	3.61	3.62
	Port 24	3.59	3.66	3.65	3.56
	Port 25	3.76	3.59	3.87	3.29
	Port 26	3.64	3.48	3.74	3.15
	Port 27	3.81	3.58	3.83	3.38
	Port 28	3.95	3.65	4.08	3.45
	Port 29	3.95	3.74	3.97	3.40
	Port 30	3.55	3.36	3.71	3.14
	Port 31	3.78	3.49	3.83	3.22
	Port 32	3.47	3.35	3.32	3.75
	Port 33	3.59	3.40	3.42	3.88
	Port 34	3.47	3.57	3.68	3.20
	Port 35	3.36	3.22	3.31	3.64
	Port 36	4.04	4.10	4.12	3.48
	Port 37	3.88	3.73	3.90	3.23
	Port 38	3.63	3.39	3.64	3.59
	Port 39	3.49	3.38	3.60	3.83
	Port 40	3.37	3.76	3.57	3.66
	Port 41	4.29	4.22	4.37	3.74
	Port 42	3.38	3.72	3.60	3.69
	Port 43	3.89	3.63	4.03	3.35
	Port 44	4.18	3.88	4.31	3.62
	Port 45	3.58	3.34	3.66	3.86
	Port 46	3.76	3.54	3.93	3.30
	Port 47	3.69	3.41	3.79	3.94
	Port 48	3.65	3.35	3.76	3.93
	Port 49	4.24	3.96	4.34	3.64
	Port 50	3.99	3.71	4.10	3.45
	Port 51	4.19	3.80	4.30	3.61
	Port 52	3.87	3.65	4.20	3.37

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	Port 53	4.13	3.86	4.29	3.55
	Port 54	3.92	3.51	3.90	3.18
	Port 55	3.90	3.66	4.08	3.28
	Port 56	4.05	3.73	4.20	3.48
	Port 57	3.88	3.64	4.02	3.39
	Port 58	3.64	3.29	3.73	3.79
	Port 59	3.69	3.35	3.76	3.85
	Port 60	3.67	3.38	3.83	3.77
	Port 61	4.29	3.91	4.30	3.66
	Port 62	3.85	3.51	4.00	3.10
	Port 63	3.67	3.37	3.97	3.86
Total PSD (mW/MHz)		152.47	146.02	155.24	143.07
Total PSD (dBm/MHz)		21.83	21.64	21.91	21.56
Antenna Gain (dBi)		14.45	14.45	14.45	14.45
Total EIRP (dBm/MHz)		36.28	36.09	36.36	36.01
EIRP Limit (dBm/MHz)		37.0	37.0	37.0	37.0
Margin (dB)		-0.72	-0.91	-0.64	-0.99
Channel	Port	Power Spectral Density (dBm/MHz)			
		QPSK	16QAM	64QAM	256QAM
Mid	Port 0	3.71	3.54	3.56	3.84
	Port 1	3.78	3.52	3.62	3.48
	Port 2	3.65	3.49	3.62	3.86
	Port 3	3.49	3.31	3.45	3.92
	Port 4	3.34	3.66	3.76	3.50
	Port 5	3.78	3.63	3.78	3.51
	Port 6	3.66	3.43	3.69	3.90
	Port 7	3.55	3.33	3.62	3.81
	Port 8	3.44	3.31	3.41	3.71
	Port 9	3.45	3.25	3.37	3.74
	Port 10	3.61	3.42	3.60	3.94
	Port 11	3.65	3.40	3.54	3.84
	Port 12	3.29	3.80	3.85	3.61
	Port 13	3.77	3.55	3.77	3.93
	Port 14	3.48	3.25	3.35	3.75
	Port 15	3.51	3.27	3.31	3.70
	Port 16	3.15	3.56	3.76	3.56
	Port 17	3.47	3.65	3.92	3.38
	Port 18	3.48	3.28	3.46	3.70
	Port 19	3.77	3.53	3.81	3.63
	Port 20	3.53	3.73	3.88	3.62
	Port 21	3.29	2.94	3.15	3.55
	Port 22	3.51	3.17	3.48	3.72
	Port 23	3.45	3.27	3.52	3.72
	Port 24	3.57	3.32	3.54	3.83
	Port 25	3.16	3.29	3.42	3.77
	Port 26	3.45	3.20	3.44	3.74
	Port 27	3.56	3.19	3.46	3.67
	Port 28	3.35	3.77	3.98	3.44
	Port 29	3.55	3.31	3.52	3.72
	Port 30	3.60	3.32	3.62	3.70
	Port 31	3.42	3.14	3.37	3.50
	Port 32	3.12	3.38	3.57	3.73
	Port 33	3.59	3.32	2.96	3.75
	Port 34	3.55	3.40	2.99	3.87
	Port 35	3.79	3.56	3.19	3.95

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	Port 36	3.32	3.63	3.87	3.84
	Port 37	3.23	4.33	3.94	3.95
	Port 38	3.62	3.70	3.23	3.85
	Port 39	3.48	3.44	3.22	3.61
	Port 40	3.50	3.52	3.57	3.64
	Port 41	3.40	3.66	3.64	3.80
	Port 42	3.77	3.49	3.83	4.03
	Port 43	3.13	3.36	3.36	3.51
	Port 44	3.72	3.99	3.56	3.94
	Port 45	3.63	3.38	3.83	3.80
	Port 46	3.68	3.49	3.97	3.89
	Port 47	3.65	3.44	3.88	3.88
	Port 48	3.74	3.57	3.98	3.91
	Port 49	3.56	4.07	3.76	3.95
	Port 50	3.88	3.55	4.02	4.02
	Port 51	3.37	4.05	3.56	3.81
	Port 52	3.36	3.96	3.69	3.91
	Port 53	3.69	3.48	3.87	3.83
	Port 54	3.91	3.78	4.02	4.02
	Port 55	3.90	3.97	3.21	3.42
	Port 56	3.14	4.22	4.29	3.00
	Port 57	3.16	3.81	3.94	3.88
	Port 58	3.72	3.72	3.79	3.88
	Port 59	3.79	3.87	3.93	3.92
	Port 60	3.71	3.87	3.95	3.99
	Port 61	3.36	4.42	3.70	3.89
	Port 62	3.69	3.63	3.71	3.76
	Port 63	3.71	3.81	3.86	3.97
Total PSD (mW/MHz)		144.62	145.52	148.01	152.15
Total PSD (dBm/MHz)		21.60	21.63	21.70	21.82
Antenna Gain (dBi)		14.45	14.45	14.45	14.45
Total EIRP (dBm/MHz)		36.05	36.08	36.15	36.27
EIRP Limit (dBm/MHz)		37.0	37.0	37.0	37.0
Margin (dB)		-0.95	-0.92	-0.85	-0.73
Channel	Port	Power Spectral Density (dBm/MHz)			
		QPSK	16QAM	64QAM	256QAM
High	Port 0	3.29	3.11	3.20	3.25
	Port 1	3.50	3.30	3.36	3.32
	Port 2	3.49	3.36	3.38	3.30
	Port 3	3.40	3.22	3.23	3.30
	Port 4	3.88	3.98	3.78	3.81
	Port 5	3.52	3.31	3.41	3.52
	Port 6	3.53	3.28	3.42	3.35
	Port 7	3.51	3.27	3.39	3.50
	Port 8	3.28	3.22	3.30	3.28
	Port 9	3.41	3.29	3.34	3.34
	Port 10	3.57	3.47	3.34	3.27
	Port 11	3.58	3.37	3.44	3.32
	Port 12	3.65	3.48	3.53	3.46
	Port 13	3.42	3.27	3.26	3.46
	Port 14	3.45	3.52	3.31	3.41
	Port 15	3.38	3.19	3.30	3.41
	Port 16	3.89	3.76	3.63	3.63
	Port 17	3.66	3.76	3.53	3.43
	Port 18	3.43	3.24	3.37	3.43

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	Port 19	3.59	3.34	3.41	3.34
	Port 20	3.59	3.37	3.43	3.60
	Port 21	3.19	3.09	3.05	3.25
	Port 22	3.30	3.12	3.13	3.26
	Port 23	3.33	3.12	3.31	3.36
	Port 24	3.26	3.19	3.28	3.28
	Port 25	3.25	3.46	3.26	3.37
	Port 26	3.23	3.17	3.21	3.27
	Port 27	3.21	3.25	3.35	3.23
	Port 28	3.51	3.54	3.55	3.54
	Port 29	3.31	3.52	3.45	3.34
	Port 30	3.18	3.28	3.23	3.40
	Port 31	2.97	3.01	3.09	3.26
	Port 32	3.81	3.75	3.89	3.76
	Port 33	3.59	3.55	3.67	3.56
	Port 34	3.19	3.30	3.39	3.22
	Port 35	3.45	3.39	3.49	3.38
	Port 36	3.91	4.16	4.01	3.89
	Port 37	3.81	3.76	3.88	3.79
	Port 38	3.35	3.38	3.45	3.39
	Port 39	3.13	3.17	2.99	3.33
	Port 40	3.39	3.45	3.48	3.43
	Port 41	4.30	4.28	4.38	4.34
	Port 42	3.63	3.87	3.65	3.58
	Port 43	3.82	3.87	3.82	3.80
	Port 44	3.94	3.96	4.01	3.97
	Port 45	3.20	3.21	3.27	3.14
	Port 46	3.44	3.66	3.49	3.68
	Port 47	3.50	3.47	3.54	3.55
	Port 48	3.41	3.49	3.44	3.37
	Port 49	3.81	4.03	3.83	3.84
	Port 50	3.55	3.64	3.67	3.55
	Port 51	4.01	4.00	4.11	4.02
	Port 52	3.70	3.72	3.74	3.65
	Port 53	3.60	3.72	3.67	3.65
	Port 54	3.45	3.49	3.47	3.53
	Port 55	3.50	3.48	3.47	3.67
	Port 56	3.31	3.40	3.36	3.37
	Port 57	3.30	3.59	3.29	3.37
	Port 58	3.41	3.52	3.47	3.54
	Port 59	3.34	3.40	3.36	3.36
	Port 60	3.42	3.42	3.50	3.43
	Port 61	3.85	4.04	3.90	3.88
	Port 62	3.24	3.35	3.26	3.31
	Port 63	3.37	3.40	3.30	3.40
	Total PSD (mW/MHz)	143.22	142.94	142.75	142.95
	Total PSD (dBm/MHz)	21.56	21.55	21.55	21.55
	Antenna Gain (dBi)	14.45	14.45	14.45	14.45
	Total EIRP (dBm/MHz)	36.01	36.00	36.00	36.00
	EIRP Limit (dBm/MHz)	37.0	37.0	37.0	37.0
	Margin (dB)	-0.99	-1.00	-1.00	-1.00

Table 8-10 PSD Test Result Table (NR_n48_1C_10M)

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Channel	Port	Power Spectral Density (dBm/MHz)	
		QPSK	16QAM
Low	Port 0	3.74	3.32
	Port 1	3.88	3.66
	Port 2	3.93	3.84
	Port 3	3.62	3.33
	Port 4	3.99	3.80
	Port 5	3.96	3.68
	Port 6	3.58	3.27
	Port 7	3.81	3.54
	Port 8	3.67	3.30
	Port 9	3.81	3.60
	Port 10	3.66	3.48
	Port 11	3.77	3.50
	Port 12	3.73	3.52
	Port 13	4.19	4.04
	Port 14	3.75	3.58
	Port 15	4.19	4.06
	Port 16	3.96	3.99
	Port 17	3.90	3.93
	Port 18	3.71	3.63
	Port 19	3.98	3.89
	Port 20	3.83	3.73
	Port 21	3.76	3.68
	Port 22	3.52	3.44
	Port 23	3.56	3.49
	Port 24	3.68	3.60
	Port 25	3.83	3.85
	Port 26	3.72	3.65
	Port 27	3.84	3.74
	Port 28	3.90	3.88
	Port 29	3.95	3.90
	Port 30	3.96	3.56
	Port 31	3.84	3.81
	Port 32	3.98	4.03
	Port 33	3.91	3.84
	Port 34	4.02	4.07
	Port 35	3.70	3.62
	Port 36	4.28	4.29
	Port 37	4.15	4.25
	Port 38	3.92	3.82
	Port 39	3.78	3.75
	Port 40	3.37	3.31
	Port 41	4.42	4.46
	Port 42	3.65	3.55
	Port 43	4.02	3.97
	Port 44	4.02	3.87
	Port 45	3.86	3.72
	Port 46	3.93	3.88
	Port 47	3.82	3.67
	Port 48	3.66	3.60
	Port 49	4.40	4.43
	Port 50	4.33	4.40
	Port 51	4.18	4.28
	Port 52	4.21	4.26

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	Port 53	4.31	4.47
	Port 54	4.22	4.32
	Port 55	4.13	4.06
	Port 56	4.39	4.39
	Port 57	4.14	4.06
	Port 58	3.99	3.93
	Port 59	3.85	3.79
	Port 60	3.92	3.87
	Port 61	4.31	4.36
	Port 62	4.36	4.34
	Port 63	3.73	3.59
Total PSD (mW/MHz)		158.20	155.22
Total PSD (dBm/MHz)		21.99	21.91
Antenna Gain (dBi)		14.45	14.45
Total EIRP (dBm/MHz)		36.44	36.36
EIRP Limit (dBm/MHz)		37.0	37.0
Margin (dB)		-0.56	-0.64
Channel	Port	Power Spectral Density (dBm/MHz)	
		QPSK	16QAM
Mid	Port 0	3.67	3.37
	Port 1	3.84	3.65
	Port 2	3.65	3.41
	Port 3	3.50	3.00
	Port 4	3.91	3.62
	Port 5	3.72	3.56
	Port 6	3.43	3.28
	Port 7	3.60	3.33
	Port 8	3.40	3.24
	Port 9	3.51	3.36
	Port 10	3.60	3.35
	Port 11	3.56	3.36
	Port 12	3.82	3.64
	Port 13	3.70	3.94
	Port 14	3.58	3.39
	Port 15	3.37	3.94
	Port 16	3.77	3.63
	Port 17	3.84	3.43
	Port 18	3.42	3.07
	Port 19	3.52	3.53
	Port 20	3.87	3.47
	Port 21	3.22	2.95
	Port 22	3.40	3.10
	Port 23	3.40	3.13
	Port 24	3.56	3.31
	Port 25	3.56	3.41
	Port 26	3.37	3.01
	Port 27	3.59	3.19
	Port 28	3.91	3.63
	Port 29	3.34	3.18
	Port 30	3.54	3.30
	Port 31	3.45	3.26
	Port 32	3.98	4.07
	Port 33	3.58	3.42
	Port 34	3.38	3.54
	Port 35	3.57	3.42



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	Port 36	4.24	4.01
	Port 37	4.07	3.99
	Port 38	3.64	3.33
	Port 39	3.35	3.14
	Port 40	3.19	2.69
	Port 41	4.17	4.06
	Port 42	3.73	3.32
	Port 43	3.75	3.53
	Port 44	4.46	3.78
	Port 45	3.56	3.31
	Port 46	3.72	3.46
	Port 47	3.61	3.26
	Port 48	3.68	3.18
	Port 49	4.27	4.13
	Port 50	3.71	3.81
	Port 51	4.25	4.06
	Port 52	4.23	3.92
	Port 53	3.47	3.60
	Port 54	3.76	3.90
	Port 55	3.81	3.55
	Port 56	4.00	3.84
	Port 57	3.69	3.55
	Port 58	3.57	3.56
	Port 59	3.53	3.42
	Port 60	3.62	3.63
	Port 61	4.20	4.18
	Port 62	3.50	3.74
	Port 63	3.67	3.49
Total PSD (mW/MHz)		149.67	143.61
Total PSD (dBm/MHz)		21.75	21.57
Antenna Gain (dBi)		14.45	14.45
Total EIRP (dBm/MHz)		36.20	36.02
EIRP Limit (dBm/MHz)		37.0	37.0
Margin (dB)		-0.80	-0.98
Channel	Port	Power Spectral Density (dBm/MHz)	
		QPSK	16QAM
High	Port 0	3.34	3.34
	Port 1	3.19	3.46
	Port 2	3.49	3.35
	Port 3	3.16	3.27
	Port 4	3.83	3.84
	Port 5	3.33	3.35
	Port 6	3.42	3.42
	Port 7	3.39	3.31
	Port 8	3.34	3.32
	Port 9	3.25	3.20
	Port 10	3.19	3.50
	Port 11	3.42	3.36
	Port 12	3.50	3.69
	Port 13	3.34	3.32
	Port 14	3.34	3.25
	Port 15	3.26	3.28
	Port 16	3.49	3.48
	Port 17	3.64	3.57
	Port 18	3.36	3.44



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	Port 19	3.59	3.49
	Port 20	3.40	3.34
	Port 21	3.15	3.08
	Port 22	3.38	3.36
	Port 23	3.29	3.25
	Port 24	3.16	3.15
	Port 25	3.38	3.41
	Port 26	3.42	3.23
	Port 27	3.40	3.44
	Port 28	3.65	3.67
	Port 29	3.60	3.56
	Port 30	3.48	3.40
	Port 31	3.24	3.22
	Port 32	4.08	3.70
	Port 33	3.36	3.53
	Port 34	3.12	3.37
	Port 35	3.53	3.40
	Port 36	4.10	3.92
	Port 37	3.83	3.69
	Port 38	3.42	3.61
	Port 39	3.23	3.33
	Port 40	3.29	3.14
	Port 41	4.25	4.11
	Port 42	3.59	3.40
	Port 43	4.07	3.82
	Port 44	3.99	3.71
	Port 45	3.39	3.25
	Port 46	3.73	3.61
	Port 47	3.64	3.68
	Port 48	3.52	3.36
	Port 49	4.10	4.16
	Port 50	3.85	3.56
	Port 51	4.19	4.12
	Port 52	3.98	3.75
	Port 53	3.81	3.73
	Port 54	3.71	3.51
	Port 55	3.73	3.61
	Port 56	3.24	3.49
	Port 57	3.57	3.35
	Port 58	3.02	3.34
	Port 59	3.56	3.42
	Port 60	3.44	3.44
	Port 61	3.53	3.74
	Port 62	3.60	3.29
	Port 63	3.56	3.48
Total PSD (mW/MHz)		144.34	142.96
Total PSD (dBm/MHz)		21.59	21.55
Antenna Gain (dBi)		14.45	14.45
Total EIRP (dBm/MHz)		36.04	36.00
EIRP Limit (dBm/MHz)		37.0	37.0
Margin (dB)		-0.96	-1.00

Table 8-11 PSD Test Result Table (NR_n48_2C_10M+20M)

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Channel	Port	Power Spectral Density (dBm/MHz)	
		QPSK	16QAM
Low	Port 0	3.09	3.29
	Port 1	3.48	3.61
	Port 2	3.63	3.71
	Port 3	3.12	3.22
	Port 4	3.64	3.75
	Port 5	3.60	3.70
	Port 6	3.16	3.24
	Port 7	3.38	3.46
	Port 8	3.20	3.34
	Port 9	3.40	3.58
	Port 10	3.21	3.39
	Port 11	3.24	3.43
	Port 12	3.26	3.49
	Port 13	3.88	4.08
	Port 14	3.39	3.55
	Port 15	3.88	4.09
	Port 16	3.65	3.70
	Port 17	3.67	3.77
	Port 18	3.30	3.43
	Port 19	3.55	3.70
	Port 20	3.45	3.51
	Port 21	3.36	3.50
	Port 22	3.20	3.39
	Port 23	3.09	3.28
	Port 24	3.19	3.39
	Port 25	3.55	3.74
	Port 26	3.29	3.54
	Port 27	3.35	3.55
	Port 28	3.55	3.72
	Port 29	3.67	3.91
	Port 30	3.38	3.55
	Port 31	3.46	3.74
	Port 32	3.62	3.97
	Port 33	3.38	3.73
	Port 34	3.76	4.06
	Port 35	3.20	3.48
	Port 36	3.82	4.15
	Port 37	3.86	4.19
	Port 38	3.46	3.71
	Port 39	3.32	3.62
	Port 40	2.90	3.17
	Port 41	4.12	4.31
	Port 42	3.39	3.41
	Port 43	3.59	3.81
	Port 44	3.51	3.79
	Port 45	3.37	3.58
	Port 46	3.45	3.70
	Port 47	3.32	3.50
	Port 48	3.25	3.39
	Port 49	4.10	4.29
	Port 50	3.97	4.21
	Port 51	3.84	4.03
	Port 52	3.91	4.09



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	Port 53	4.06	4.26
	Port 54	3.87	4.01
	Port 55	3.64	3.90
	Port 56	3.98	4.10
	Port 57	3.76	3.84
	Port 58	3.65	3.77
	Port 59	3.51	3.62
	Port 60	3.58	3.63
	Port 61	4.13	4.22
	Port 62	4.00	4.16
	Port 63	3.47	3.53
Total PSD (mW/MHz)		144.65	150.79
Total PSD (dBm/MHz)		21.60	21.78
Antenna Gain (dBi)		14.45	14.45
Total EIRP (dBm/MHz)		36.05	36.23
EIRP Limit (dBm/MHz)		37.0	37.0
Margin (dB)		-0.95	-0.77
Channel	Port	Power Spectral Density (dBm/MHz)	
		QPSK	16QAM
Mid	Port 0	3.37	3.35
	Port 1	3.55	3.62
	Port 2	3.34	3.38
	Port 3	3.14	3.08
	Port 4	3.71	3.70
	Port 5	3.30	3.31
	Port 6	3.22	3.33
	Port 7	3.24	3.24
	Port 8	3.05	3.05
	Port 9	3.19	3.24
	Port 10	3.39	3.36
	Port 11	3.29	3.36
	Port 12	3.50	3.50
	Port 13	3.34	3.50
	Port 14	3.25	3.30
	Port 15	3.05	3.08
	Port 16	3.56	3.53
	Port 17	3.58	3.53
	Port 18	3.10	3.20
	Port 19	3.34	3.42
	Port 20	3.57	3.58
	Port 21	2.81	2.83
	Port 22	3.15	3.28
	Port 23	3.05	3.11
	Port 24	3.33	3.35
	Port 25	3.23	3.33
	Port 26	3.15	3.12
	Port 27	3.36	3.49
	Port 28	3.72	3.68
	Port 29	3.16	3.25
	Port 30	3.20	3.29
	Port 31	3.03	3.05
	Port 32	4.31	3.91
	Port 33	3.46	3.25
	Port 34	3.26	2.81
	Port 35	3.46	2.90



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	Port 36	4.40	4.50
	Port 37	4.56	4.46
	Port 38	3.41	3.02
	Port 39	3.10	2.72
	Port 40	2.88	2.92
	Port 41	4.21	4.41
	Port 42	3.80	3.48
	Port 43	3.50	3.60
	Port 44	3.80	4.34
	Port 45	3.27	3.30
	Port 46	3.44	3.49
	Port 47	3.27	3.28
	Port 48	3.38	3.38
	Port 49	4.38	4.51
	Port 50	4.03	3.62
	Port 51	4.33	4.46
	Port 52	3.87	4.46
	Port 53	3.44	3.40
	Port 54	4.02	3.75
	Port 55	4.01	3.63
	Port 56	4.19	3.80
	Port 57	3.41	3.47
	Port 58	3.39	3.45
	Port 59	3.35	3.51
	Port 60	3.32	3.38
	Port 61	3.95	4.51
	Port 62	3.24	3.21
	Port 63	3.42	3.40
Total PSD (mW/MHz)		143.41	143.40
Total PSD (dBm/MHz)		21.57	21.57
Antenna Gain (dBi)		14.45	14.45
Total EIRP (dBm/MHz)		36.02	36.02
EIRP Limit (dBm/MHz)		37.0	37.0
Margin (dB)		-0.98	-0.98
Channel	Port	Power Spectral Density (dBm/MHz)	
		QPSK	16QAM
High	Port 0	3.32	3.38
	Port 1	3.47	3.49
	Port 2	3.37	3.41
	Port 3	3.24	3.26
	Port 4	3.74	3.98
	Port 5	3.55	3.49
	Port 6	3.48	3.45
	Port 7	3.38	3.40
	Port 8	3.39	3.49
	Port 9	3.33	3.47
	Port 10	3.53	3.51
	Port 11	3.49	3.53
	Port 12	3.71	3.85
	Port 13	3.35	3.41
	Port 14	3.57	3.38
	Port 15	3.25	3.29
	Port 16	3.55	3.58
	Port 17	3.64	3.69
	Port 18	3.36	3.43



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	Port 19	3.48	3.43
	Port 20	3.85	3.78
	Port 21	3.12	3.13
	Port 22	3.17	3.29
	Port 23	3.16	3.23
	Port 24	3.35	3.29
	Port 25	3.24	3.24
	Port 26	3.25	3.28
	Port 27	3.53	3.52
	Port 28	3.95	3.87
	Port 29	3.32	3.39
	Port 30	3.24	3.29
	Port 31	2.93	2.99
	Port 32	3.74	4.00
	Port 33	3.36	3.54
	Port 34	3.17	3.31
	Port 35	3.54	3.70
	Port 36	4.02	4.24
	Port 37	3.84	3.90
	Port 38	3.40	3.46
	Port 39	3.20	3.30
	Port 40	3.17	3.28
	Port 41	4.34	4.49
	Port 42	3.71	3.70
	Port 43	3.89	4.02
	Port 44	4.00	4.08
	Port 45	3.37	3.39
	Port 46	3.65	3.51
	Port 47	3.48	3.56
	Port 48	3.51	3.58
	Port 49	4.08	4.11
	Port 50	3.70	3.81
	Port 51	4.16	4.20
	Port 52	4.06	4.05
	Port 53	3.60	3.69
	Port 54	3.66	3.77
	Port 55	3.62	3.62
	Port 56	3.79	3.85
	Port 57	3.57	3.65
	Port 58	3.52	3.63
	Port 59	3.32	3.46
	Port 60	3.53	3.48
	Port 61	3.90	4.04
	Port 62	3.41	3.41
	Port 63	3.38	3.45
Total PSD (mW/MHz)		144.61	146.47
Total PSD (dBm/MHz)		21.60	21.66
Antenna Gain (dBi)		14.45	14.45
Total EIRP (dBm/MHz)		36.05	36.11
EIRP Limit (dBm/MHz)		37.0	37.0
Margin (dB)		-0.95	-0.89

Table 8-12 PSD Test Result Table (NR_n48_3C_10M+20M+20M)

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Channel	Port	Power Spectral Density (dBm/MHz)	
		QPSK	16QAM
Low	Port 0	3.17	3.12
	Port 1	3.45	3.45
	Port 2	3.66	3.67
	Port 3	3.14	3.06
	Port 4	3.59	3.59
	Port 5	3.49	3.50
	Port 6	3.16	3.16
	Port 7	3.32	3.42
	Port 8	3.18	3.22
	Port 9	3.34	3.44
	Port 10	3.21	3.22
	Port 11	3.27	3.33
	Port 12	3.40	3.24
	Port 13	3.92	3.94
	Port 14	3.37	3.34
	Port 15	3.94	3.93
	Port 16	3.56	3.65
	Port 17	3.63	3.68
	Port 18	3.26	3.32
	Port 19	3.58	3.59
	Port 20	3.42	3.37
	Port 21	3.32	3.42
	Port 22	3.05	3.21
	Port 23	3.07	3.22
	Port 24	3.20	3.23
	Port 25	3.43	3.49
	Port 26	3.27	3.36
	Port 27	3.34	3.40
	Port 28	3.41	3.56
	Port 29	3.58	3.69
	Port 30	3.28	3.34
	Port 31	3.56	3.65
	Port 32	3.15	3.59
	Port 33	3.02	3.51
	Port 34	3.45	3.83
	Port 35	2.88	3.37
	Port 36	3.49	3.98
	Port 37	3.54	3.94
	Port 38	3.10	3.56
	Port 39	3.12	3.48
	Port 40	2.75	2.96
	Port 41	4.03	4.18
	Port 42	3.22	3.22
	Port 43	3.52	3.63
	Port 44	3.47	3.58
	Port 45	3.33	3.47
	Port 46	3.43	3.53
	Port 47	3.27	3.46
	Port 48	3.14	3.29
	Port 49	4.00	4.12
	Port 50	3.98	4.08
	Port 51	3.82	3.99
	Port 52	3.85	3.93

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	Port 53	4.04	4.09
	Port 54	3.89	3.97
	Port 55	3.59	3.67
	Port 56	3.16	3.95
	Port 57	3.03	3.70
	Port 58	2.96	3.61
	Port 59	2.98	3.41
	Port 60	2.72	3.44
	Port 61	3.43	4.09
	Port 62	3.24	4.02
	Port 63	2.73	3.38
Total PSD (mW/MHz)		139.51	145.60
Total PSD (dBm/MHz)		21.45	21.63
Antenna Gain (dBi)		14.45	14.45
Total EIRP (dBm/MHz)		35.90	36.08
EIRP Limit (dBm/MHz)		37.0	37.0
Margin (dB)		-1.10	-0.92
Channel	Port	Power Spectral Density (dBm/MHz)	
		QPSK	16QAM
Mid	Port 0	3.41	3.30
	Port 1	3.85	3.60
	Port 2	3.40	3.52
	Port 3	3.19	3.20
	Port 4	3.49	3.60
	Port 5	3.49	3.61
	Port 6	3.38	3.39
	Port 7	3.43	3.39
	Port 8	3.19	3.19
	Port 9	3.47	3.40
	Port 10	3.71	3.54
	Port 11	3.56	3.43
	Port 12	3.42	3.51
	Port 13	4.14	4.01
	Port 14	3.49	3.38
	Port 15	4.18	4.00
	Port 16	3.63	3.68
	Port 17	3.56	3.52
	Port 18	3.37	3.13
	Port 19	3.95	3.81
	Port 20	3.44	3.54
	Port 21	3.04	3.20
	Port 22	3.59	3.56
	Port 23	3.62	3.40
	Port 24	3.38	3.48
	Port 25	3.59	3.49
	Port 26	3.50	3.36
	Port 27	3.59	3.42
	Port 28	3.62	3.69
	Port 29	3.44	3.47
	Port 30	3.54	3.35
	Port 31	3.57	3.50
	Port 32	3.61	4.16
	Port 33	3.54	3.59
	Port 34	3.74	3.72
	Port 35	3.34	3.45



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	Port 36	3.65	3.98
	Port 37	4.08	4.27
	Port 38	3.41	3.45
	Port 39	3.16	3.32
	Port 40	2.69	2.82
	Port 41	4.28	4.05
	Port 42	3.66	3.49
	Port 43	3.93	3.65
	Port 44	3.71	3.69
	Port 45	3.77	3.54
	Port 46	3.81	3.58
	Port 47	3.63	3.52
	Port 48	3.22	3.29
	Port 49	4.24	4.24
	Port 50	3.93	3.95
	Port 51	4.14	4.11
	Port 52	3.94	4.10
	Port 53	4.00	3.76
	Port 54	4.25	3.98
	Port 55	3.82	3.78
	Port 56	3.77	3.70
	Port 57	3.58	3.61
	Port 58	3.90	3.81
	Port 59	3.70	3.44
	Port 60	3.68	3.49
	Port 61	4.15	3.94
	Port 62	3.92	3.83
	Port 63	3.73	3.32
Total PSD (mW/MHz)		148.46	146.84
Total PSD (dBm/MHz)		21.72	21.67
Antenna Gain (dBi)		14.45	14.45
Total EIRP (dBm/MHz)		36.17	36.12
EIRP Limit (dBm/MHz)		37.00	37.00
Margin (dB)		-0.83	-0.88
Channel	Port	Power Spectral Density (dBm/MHz)	
		QPSK	16QAM
High	Port 0	3.44	3.35
	Port 1	3.50	3.52
	Port 2	3.39	3.51
	Port 3	3.23	3.36
	Port 4	3.67	3.97
	Port 5	3.42	3.56
	Port 6	3.46	3.56
	Port 7	3.43	3.50
	Port 8	3.27	3.37
	Port 9	3.12	3.41
	Port 10	3.41	3.58
	Port 11	3.52	3.54
	Port 12	3.72	3.97
	Port 13	3.43	3.66
	Port 14	3.31	3.47
	Port 15	3.32	3.37
	Port 16	3.62	3.74
	Port 17	3.71	3.90
	Port 18	3.44	3.48



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	Port 19	3.68	3.66
	Port 20	3.91	4.02
	Port 21	3.10	3.22
	Port 22	3.24	3.38
	Port 23	3.15	3.36
	Port 24	3.36	3.46
	Port 25	3.37	3.56
	Port 26	3.30	3.45
	Port 27	3.32	3.41
	Port 28	3.76	3.93
	Port 29	3.38	3.42
	Port 30	3.29	3.38
	Port 31	3.05	3.17
	Port 32	3.77	3.96
	Port 33	3.24	3.38
	Port 34	3.55	3.60
	Port 35	3.54	3.83
	Port 36	4.11	4.25
	Port 37	4.01	4.23
	Port 38	3.53	3.63
	Port 39	3.17	3.39
	Port 40	3.27	3.40
	Port 41	4.15	4.24
	Port 42	3.55	3.67
	Port 43	3.78	3.92
	Port 44	4.07	4.20
	Port 45	3.31	3.56
	Port 46	3.52	3.64
	Port 47	3.43	3.58
	Port 48	3.57	3.69
	Port 49	4.12	4.24
	Port 50	3.70	3.70
	Port 51	4.09	4.23
	Port 52	4.17	4.34
	Port 53	3.50	3.59
	Port 54	3.74	3.81
	Port 55	3.80	3.87
	Port 56	3.99	4.11
	Port 57	3.61	3.79
	Port 58	3.54	3.55
	Port 59	3.49	3.62
	Port 60	3.55	3.57
	Port 61	4.06	4.18
	Port 62	3.53	3.54
	Port 63	3.52	3.61
Total PSD (mW/MHz)		145.27	149.47
Total PSD (dBm/MHz)		21.62	21.75
Antenna Gain (dBi)		14.45	14.45
Total EIRP (dBm/MHz)		36.07	36.20
EIRP Limit (dBm/MHz)		37.00	37.00
Margin (dB)		-0.93	-0.80

Table 8-13 PSD Test Result Table (NR_n48_3C_10M+20M+40M)