

TEST REPORT

FCC Sub6 n77(78) Test for TM18FNROBM0
Certification

APPLICANT
LG Electronics Inc.

REPORT NO.
HCT-RF-2507-FC094

DATE OF ISSUE
July 22, 2025

Tested by
Jae Ryang Do



Technical Manager
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Accredited by KOLAS, Republic of KOREA

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DATE OF ISSUE

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Applicant

LG Electronics Inc.

128, Yeoui-daero, Yeongdeungpo-gu, Seoul, Republic of Korea

Product Name

Telematics

Model Name

TM18FNROBM0

Date of Test

May 16, 2025 ~ July 22, 2025

Location of Test

☒ Permanent Testing Lab ☐ On Site Testing

(Address: 74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, Republic of Korea)

FCC ID

2B03LTM18FNROBM0

FCC Classification

PCS Licensed Transmitter (PCB)

Test Standard Used

FCC Rule Part(s) : § 27

Test Results

PASS

REVISION HISTORY

The revision history for this test report is shown in table.

Revision No.	Date of Issue	Description
0	July 22, 2025	Initial Release

Notice

Content

The measurements shown in this report were made in accordance with the procedures specified in CFR47 section § 2.947. I assume full responsibility for the accuracy and completeness of these measurements, and for the qualifications of all persons taking them.

HCT CO., LTD. Certifies that no party to this application has subject to a denial of Federal benefits that includes FCC benefits pursuant to section 5301 of the Anti-Drug Abuse Act of 1998, 21 U.S.C. 853(a)

The results shown in this test report only apply to the sample(s), as received, provided by the applicant, unless otherwise stated.

The test results have only been applied with the test methods required by the standard(s).

The laboratory is not accredited for the test results marked *.

Information provided by the applicant is marked **.

Test results provided by external providers are marked ***.

When confirmation of authenticity of this test report is required, please contact www.hct.co.kr

This test report provides test result(s) under the scope accredited by the Korea Laboratory Accreditation Scheme (KOLAS), which signed the ILAC-MRA.
(KOLAS (KS Q ISO/IEC 17025) Accreditation No. KT197)

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MEASUREMENT REPORT

1.GENERAL INFORMATION

Model(s):	TM18FNROBM0
Voltage:	4.2V
SCS(kHz):	30
Bandwidth(MHz):	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100
Waveform:	CP-OFDM, DFT-S-OFDM
Modulation:	DFT-S-OFDM: PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM CP-OFDM: QPSK, 16QAM, 64QAM, 256QAM
Tx Frequency: (3450 MHz - 3550 MHz)	3455.01 MHz – 3544.99 MHz (Sub6 n77)(10 MHz)) 3457.50 MHz – 3542.50 MHz (Sub6 n77)(15 MHz)) 3460.02 MHz – 3540.00 MHz (Sub6 n77)(20 MHz)) 3462.50 MHz – 3537.50 MHz (Sub6 n77)(25 MHz)) 3465.00 MHz – 3534.99 MHz (Sub6 n77)(30 MHz)) 3470.01 MHz – 3529.98 MHz (Sub6 n77)(40 MHz)) 3475.02 MHz – 3525.00 MHz (Sub6 n77)(50 MHz)) 3480.00 MHz – 3519.99 MHz (Sub6 n77)(60 MHz)) 3485.01 MHz – 3514.98 MHz (Sub6 n77)(70 MHz)) 3490.02 MHz – 3510.00 MHz (Sub6 n77)(80 MHz)) 3495.00 MHz – 3504.99 MHz (Sub6 n77)(90 MHz)) 3500.01 MHz (Sub6 n77)(100 MHz))
Tx Frequency: (3700 MHz - 3980 MHz)	3705.00 MHz – 3975.00 MHz (Sub6 n77(78)(10 MHz)) 3707.51 MHz – 3972.48 MHz (Sub6 n77(78)(15 MHz)) 3710.01 MHz – 3969.99 MHz (Sub6 n77(78)(20 MHz)) 3712.50 MHz – 3967.50 MHz (Sub6 n77(78)(25 MHz)) 3715.02 MHz – 3964.98 MHz (Sub6 n77(78)(30 MHz)) 3720.00 MHz – 3960.00 MHz (Sub6 n77(78)(40 MHz)) 3725.10 MHz – 3954.99 MHz (Sub6 n77(78)(50 MHz)) 3730.02 MHz – 3949.98 MHz (Sub6 n77(78)(60 MHz)) 3735.00 MHz – 3945.00 MHz (Sub6 n77(78)(70 MHz)) 3740.01 MHz – 3939.99 MHz (Sub6 n77(78)(80 MHz)) 3745.02 MHz – 3934.98 MHz (Sub6 n77(78)(90 MHz)) 3750.00 MHz – 3930.00 MHz (Sub6 n77(78)(100 MHz))
EUT Serial number:	Radiated : BMW ICON-25SF Radiated #5 Conducted : BMW ICON-25SF Conducted #18
Antenna Information	Please refer to the Antenna Specification document.

1.1. SUPPORTED BANDS PER ANTENNA PORT

Antenna Port	Supported bands
MIMO 1	- GSM850, 1900 - WCDMA: B2, 4, 5 - LTE: B4, 7, 12(17), 25(2), 26(5), 41(38), 42 - NR: n7, 41, 77(78) - ULCA: 7C
MIMO 2	- LTE: B42 - NR: n77(78)
MIMO 3	Only RX
MIMO 4	Only RX
Int. BUA (Back Up Antenna)	- GSM850, 1900 - WCDMA: B2, 4, 5 - LTE: B4, 7, 25(2), 26(5), 41(38) - NR: n7, 41 - ULCA: 7C

Note:

1. Since the Int. BUA uses the same antenna port as MIMO1, only radiated testing was performed.

1.2 MAXIMUM OUTPUT POWER

MIMO1(3450 MHz - 3550 MHz)

Mode (MHz)	Tx Frequency (MHz)	Emission Designator	Modulation	Conducted Output Power	
				Max. Power (W)	Max. Power (dBm)
Sub6 n77 (10)	3455.01 – 3544.99	8M64G7D	PI/2 BPSK	0.169	22.29
		8M61G7D	QPSK	0.170	22.31
		8M63W7D	16QAM	0.131	21.16
		8M65W7D	64 QAM	0.085	19.28
		8M61W7D	256 QAM	0.062	17.95
Sub6 n77 (15)	3457.50 – 3542.50	12M9G7D	PI/2 BPSK	0.173	22.38
		13M0G7D	QPSK	0.171	22.32
		13M0W7D	16QAM	0.136	21.32
		12M9W7D	64 QAM	0.092	19.66
		13M0W7D	256 QAM	0.060	17.75
Sub6 n77 (20)	3460.02 – 3540.00	18M0G7D	PI/2 BPSK	0.171	22.33
		17M8G7D	QPSK	0.175	22.43
		18M0W7D	16QAM	0.126	20.99
		17M9W7D	64 QAM	0.090	19.56
		17M9W7D	256 QAM	0.058	17.67
Sub6 n77 (25)	3462.50 – 3537.50	23M0G7D	PI/2 BPSK	0.169	22.28
		22M8G7D	QPSK	0.172	22.35
		23M0W7D	16QAM	0.134	21.28
		22M9W7D	64 QAM	0.092	19.62
		22M9W7D	256 QAM	0.057	17.58
Sub6 n77 (30)	3465.00 – 3534.99	26M9G7D	PI/2 BPSK	0.167	22.23
		26M8G7D	QPSK	0.166	22.20
		26M9W7D	16QAM	0.125	20.98
		26M9W7D	64 QAM	0.090	19.55
		26M9W7D	256 QAM	0.059	17.70
Sub6 n77 (40)	3470.01 – 3529.98	35M8G7D	PI/2 BPSK	0.167	22.22
		35M9G7D	QPSK	0.167	22.24
		35M8W7D	16QAM	0.124	20.95
		35M8W7D	64 QAM	0.088	19.43
		35M8W7D	256 QAM	0.057	17.56
Sub6 n77 (50)	3475.02 – 3525.00	46M0G7D	PI/2 BPSK	0.163	22.13
		46M0G7D	QPSK	0.164	22.14
		45M9W7D	16QAM	0.124	20.95
		45M8W7D	64 QAM	0.092	19.63
		45M8W7D	256 QAM	0.053	17.21
Sub6 n77 (60)	3480.00 – 3519.99	58M0G7D	PI/2 BPSK	0.156	21.92
		57M9G7D	QPSK	0.156	21.94
		58M1W7D	16QAM	0.124	20.93
		57M9W7D	64 QAM	0.090	19.55
		57M9W7D	256 QAM	0.057	17.58
Sub6 n77 (70)	3485.01 – 3514.98	64M4G7D	PI/2 BPSK	0.155	21.90
		64M6G7D	QPSK	0.155	21.90
		64M5W7D	16QAM	0.119	20.76
		64M3W7D	64 QAM	0.086	19.34
		64M6W7D	256 QAM	0.055	17.43
Sub6 n77 (80)	3490.02 – 3510.00	77M3G7D	PI/2 BPSK	0.153	21.85
		77M4G7D	QPSK	0.154	21.88
		77M3W7D	16QAM	0.119	20.76
		77M2W7D	64 QAM	0.087	19.42
		77M3W7D	256 QAM	0.061	17.87
Sub6 n77 (90)	3495.00 – 3504.99	86M9G7D	PI/2 BPSK	0.158	22.00
		87M1G7D	QPSK	0.162	22.09
		86M9W7D	16QAM	0.121	20.81
		87M2W7D	64 QAM	0.089	19.48
		86M8W7D	256 QAM	0.061	17.88
Sub6 n77 (100)	3500.01	96M6G7D	PI/2 BPSK	0.162	22.10
		96M7G7D	QPSK	0.160	22.04
		96M5W7D	16QAM	0.117	20.69
		96M6W7D	64 QAM	0.086	19.34
		96M5W7D	256 QAM	0.061	17.88

MIMO1(3700 MHz - 3980 MHz)

Mode (MHz)	Tx Frequency (MHz)	Emission Designator	Modulation	Conducted Output Power	
				Max. Power (W)	Max. Power (dBm)
Sub6 n77(78) (10)	3705.00 – 3975.00	8M65G7D	PI/2 BPSK	0.171	22.32
		8M62G7D	QPSK	0.170	22.30
		8M60W7D	16QAM	0.135	21.29
		8M61W7D	64 QAM	0.098	19.93
		8M60W7D	256 QAM	0.058	17.66
Sub6 n77(78) (15)	3707.51 – 3972.48	12M9G7D	PI/2 BPSK	0.167	22.23
		12M9G7D	QPSK	0.164	22.15
		12M9W7D	16QAM	0.132	21.19
		13M0W7D	64 QAM	0.098	19.92
		12M9W7D	256 QAM	0.058	17.65
Sub6 n77(78) (20)	3710.01 – 3969.99	17M9G7D	PI/2 BPSK	0.169	22.28
		17M9G7D	QPSK	0.169	22.29
		17M9W7D	16QAM	0.135	21.30
		17M8W7D	64 QAM	0.099	19.97
		18M0W7D	256 QAM	0.060	17.79
Sub6 n77(78) (25)	3712.50 – 3967.50	22M9G7D	PI/2 BPSK	0.172	22.36
		23M0G7D	QPSK	0.175	22.42
		22M9W7D	16QAM	0.136	21.32
		23M0W7D	64 QAM	0.091	19.59
		22M9W7D	256 QAM	0.059	17.74
Sub6 n77(78) (30)	3715.02 – 3964.98	26M9G7D	PI/2 BPSK	0.169	22.27
		26M9G7D	QPSK	0.165	22.17
		26M9W7D	16QAM	0.129	21.10
		26M9W7D	64 QAM	0.092	19.66
		26M9W7D	256 QAM	0.059	17.74
Sub6 n77(78) (40)	3720.00 – 3960.00	35M8G7D	PI/2 BPSK	0.168	22.25
		35M8G7D	QPSK	0.166	22.21
		36M0W7D	16QAM	0.128	21.07
		35M8W7D	64 QAM	0.092	19.63
		35M8W7D	256 QAM	0.058	17.60
Sub6 n77(78) (50)	3725.10 – 3954.99	45M8G7D	PI/2 BPSK	0.164	22.16
		45M8G7D	QPSK	0.160	22.04
		45M9W7D	16QAM	0.137	21.36
		45M9W7D	64 QAM	0.096	19.83
		45M8W7D	256 QAM	0.058	17.64
Sub6 n77(78) (60)	3730.02 – 3949.98	57M9G7D	PI/2 BPSK	0.163	22.11
		58M0G7D	QPSK	0.166	22.20
		58M0W7D	16QAM	0.132	21.22
		58M0W7D	64 QAM	0.094	19.75
		57M9W7D	256 QAM	0.056	17.47
Sub6 n77(78) (70)	3735.00 – 3945.00	64M4G7D	PI/2 BPSK	0.165	22.18
		64M5G7D	QPSK	0.159	22.02
		64M5W7D	16QAM	0.126	20.99
		64M4W7D	64 QAM	0.091	19.58
		64M4W7D	256 QAM	0.056	17.52
Sub6 n77(78) (80)	3740.01 – 3939.99	77M4G7D	PI/2 BPSK	0.163	22.11
		77M4G7D	QPSK	0.159	22.02
		77M5W7D	16QAM	0.124	20.93
		77M2W7D	64 QAM	0.090	19.53
		77M2W7D	256 QAM	0.062	17.94
Sub6 n77(78) (90)	3745.02 – 3934.98	87M1G7D	PI/2 BPSK	0.160	22.04
		87M1G7D	QPSK	0.160	22.03
		86M9W7D	16QAM	0.126	21.00
		86M9W7D	64 QAM	0.092	19.65
		86M9W7D	256 QAM	0.056	17.49
Sub6 n77(78) (100)	3750.00 – 3930.00	96M6G7D	PI/2 BPSK	0.160	22.05
		96M9G7D	QPSK	0.160	22.05
		96M5W7D	16QAM	0.124	20.93
		96M5W7D	64 QAM	0.090	19.56
		96M6W7D	256 QAM	0.057	17.54

MIMO2(3450 MHz - 3550 MHz)

Mode (MHz)	Tx Frequency (MHz)	Emission Designator	Modulation	Conducted Output Power	
				Max. Power (W)	Max. Power (dBm)
Sub6 n77 (10)	3455.01 – 3544.99	8M58G7D	PI/2 BPSK	0.232	23.66
		8M61G7D	QPSK	0.230	23.62
		8M62W7D	16QAM	0.195	22.91
		8M61W7D	64 QAM	0.136	21.33
		8M63W7D	256 QAM	0.083	19.17
Sub6 n77 (15)	3457.50 – 3542.50	13M0G7D	PI/2 BPSK	0.231	23.63
		12M9G7D	QPSK	0.228	23.57
		12M9W7D	16QAM	0.192	22.83
		12M9W7D	64 QAM	0.136	21.33
		13M0W7D	256 QAM	0.083	19.18
Sub6 n77 (20)	3460.02 – 3540.00	17M9G7D	PI/2 BPSK	0.236	23.72
		17M9G7D	QPSK	0.232	23.65
		18M0W7D	16QAM	0.187	22.73
		17M9W7D	64 QAM	0.134	21.28
		18M0W7D	256 QAM	0.081	19.11
Sub6 n77 (25)	3462.50 – 3537.50	22M9G7D	PI/2 BPSK	0.244	23.88
		22M9G7D	QPSK	0.237	23.74
		23M0W7D	16QAM	0.155	21.90
		22M9W7D	64 QAM	0.134	21.28
		22M9W7D	256 QAM	0.082	19.16
Sub6 n77 (30)	3465.00 – 3534.99	26M8G7D	PI/2 BPSK	0.228	23.57
		26M9G7D	QPSK	0.225	23.53
		26M9W7D	16QAM	0.193	22.86
		26M9W7D	64 QAM	0.136	21.34
		26M8W7D	256 QAM	0.083	19.19
Sub6 n77 (40)	3470.01 – 3529.98	35M8G7D	PI/2 BPSK	0.230	23.61
		35M8G7D	QPSK	0.226	23.54
		35M8W7D	16QAM	0.186	22.70
		35M9W7D	64 QAM	0.133	21.24
		35M8W7D	256 QAM	0.081	19.10
Sub6 n77 (50)	3475.02 – 3525.00	45M8G7D	PI/2 BPSK	0.230	23.61
		45M9G7D	QPSK	0.225	23.53
		45M9W7D	16QAM	0.195	22.89
		45M9W7D	64 QAM	0.140	21.45
		45M8W7D	256 QAM	0.085	19.28
Sub6 n77 (60)	3480.00 – 3519.99	57M9G7D	PI/2 BPSK	0.226	23.55
		57M8G7D	QPSK	0.223	23.49
		57M8W7D	16QAM	0.188	22.74
		57M9W7D	64 QAM	0.134	21.28
		57M9W7D	256 QAM	0.080	19.04
Sub6 n77 (70)	3485.01 – 3514.98	64M5G7D	PI/2 BPSK	0.227	23.56
		64M6G7D	QPSK	0.223	23.49
		64M5W7D	16QAM	0.180	22.56
		64M3W7D	64 QAM	0.132	21.19
		64M5W7D	256 QAM	0.080	19.03
Sub6 n77 (80)	3490.02 – 3510.00	77M2G7D	PI/2 BPSK	0.224	23.51
		77M2G7D	QPSK	0.223	23.48
		77M2W7D	16QAM	0.180	22.56
		77M1W7D	64 QAM	0.133	21.25
		77M0W7D	256 QAM	0.080	19.03
Sub6 n77 (90)	3495.00 – 3504.99	86M7G7D	PI/2 BPSK	0.225	23.53
		86M8G7D	QPSK	0.224	23.50
		87M1W7D	16QAM	0.183	22.63
		87M0W7D	64 QAM	0.129	21.09
		86M7W7D	256 QAM	0.079	18.95
Sub6 n77 (100)	3500.01	96M5G7D	PI/2 BPSK	0.225	23.53
		96M6G7D	QPSK	0.222	23.47
		96M5W7D	16QAM	0.182	22.61
		96M5W7D	64 QAM	0.128	21.07
		96M4W7D	256 QAM	0.078	18.92

MIMO2(3700 MHz - 3980 MHz)

Mode (MHz)	Tx Frequency (MHz)	Emission Designator	Modulation	Conducted Output Power	
				Max. Power (W)	Max. Power (dBm)
Sub6 n77(78) (10)	3705.00 – 3975.00	8M62G7D	PI/2 BPSK	0.239	23.79
		8M63G7D	QPSK	0.231	23.63
		8M62W7D	16QAM	0.195	22.89
		8M63W7D	64 QAM	0.137	21.38
		8M63W7D	256 QAM	0.085	19.29
Sub6 n77(78) (15)	3707.51 – 3972.48	12M9G7D	PI/2 BPSK	0.232	23.66
		12M9G7D	QPSK	0.230	23.61
		12M9W7D	16QAM	0.194	22.87
		13M0W7D	64 QAM	0.134	21.27
		12M9W7D	256 QAM	0.085	19.30
Sub6 n77(78) (20)	3710.01 – 3969.99	18M0G7D	PI/2 BPSK	0.237	23.74
		17M9G7D	QPSK	0.234	23.69
		17M9W7D	16QAM	0.194	22.87
		17M9W7D	64 QAM	0.136	21.35
		18M0W7D	256 QAM	0.083	19.19
Sub6 n77(78) (25)	3712.50 – 3967.50	22M9G7D	PI/2 BPSK	0.239	23.78
		22M9G7D	QPSK	0.235	23.71
		22M9W7D	16QAM	0.193	22.85
		22M9W7D	64 QAM	0.131	21.17
		22M9W7D	256 QAM	0.082	19.12
Sub6 n77(78) (30)	3715.02 – 3964.98	26M8G7D	PI/2 BPSK	0.231	23.63
		26M9G7D	QPSK	0.228	23.58
		26M9W7D	16QAM	0.193	22.85
		26M9W7D	64 QAM	0.136	21.35
		26M9W7D	256 QAM	0.083	19.21
Sub6 n77(78) (40)	3720.00 – 3960.00	35M8G7D	PI/2 BPSK	0.236	23.73
		35M8G7D	QPSK	0.232	23.66
		35M8W7D	16QAM	0.194	22.88
		35M9W7D	64 QAM	0.135	21.29
		35M8W7D	256 QAM	0.083	19.21
Sub6 n77(78) (50)	3725.10 – 3954.99	45M9G7D	PI/2 BPSK	0.227	23.56
		45M9G7D	QPSK	0.226	23.54
		45M8W7D	16QAM	0.191	22.81
		45M9W7D	64 QAM	0.132	21.20
		45M8W7D	256 QAM	0.082	19.13
Sub6 n77(78) (60)	3730.02 – 3949.98	58M0G7D	PI/2 BPSK	0.228	23.58
		57M8G7D	QPSK	0.224	23.50
		57M9W7D	16QAM	0.186	22.69
		57M9W7D	64 QAM	0.134	21.26
		57M9W7D	256 QAM	0.082	19.14
Sub6 n77(78) (70)	3735.00 – 3945.00	64M5G7D	PI/2 BPSK	0.229	23.60
		64M5G7D	QPSK	0.224	23.50
		64M4W7D	16QAM	0.191	22.80
		64M4W7D	64 QAM	0.137	21.38
		64M4W7D	256 QAM	0.084	19.22
Sub6 n77(78) (80)	3740.01 – 3939.99	77M4G7D	PI/2 BPSK	0.232	23.66
		77M4G7D	QPSK	0.230	23.61
		77M1W7D	16QAM	0.189	22.77
		77M3W7D	64 QAM	0.136	21.34
		77M2W7D	256 QAM	0.084	19.25
Sub6 n77(78) (90)	3745.02 – 3934.98	87M0G7D	PI/2 BPSK	0.234	23.70
		87M0G7D	QPSK	0.230	23.62
		86M8W7D	16QAM	0.196	22.93
		86M8W7D	64 QAM	0.128	21.07
		86M9W7D	256 QAM	0.083	19.20
Sub6 n77(78) (100)	3750.00 – 3930.00	96M5G7D	PI/2 BPSK	0.230	23.61
		96M7G7D	QPSK	0.225	23.53
		96M4W7D	16QAM	0.179	22.54
		96M7W7D	64 QAM	0.130	21.14
		96M4W7D	256 QAM	0.079	18.99

2. INTRODUCTION

2.1. DESCRIPTION OF EUT

Please refer to the [2G3G] Test Report.

2.2. MEASURING INSTRUMENT CALIBRATION

The measuring equipment, which was utilized in performing the tests documented herein, has been calibrated in accordance with the manufacturer's recommendations for utilizing calibration equipment, which is traceable to recognized national standards.

2.3. TEST FACILITY

The Fully-anechoic chamber and conducted measurement facility used to collect the radiated data are located at the 74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, Republic of Korea.

Detailed description of test facility was submitted to the Commission and accepted dated March 11, 2024 (Registration Number: KR0032).

3. DESCRIPTION OF TESTS

3.1 TEST PROCEDURE

Test Description	Test Procedure Used
Occupied Bandwidth	- KDB 971168 D01 v03r01 – Section 4.3 - ANSI C63.26-2015 – Section 5.4.4
Band Edge	- KDB 971168 D01 v03r01 – Section 6.0 - ANSI C63.26-2015 – Section 5.7
Spurious and Harmonic Emissions at Antenna Terminal	- KDB 971168 D01 v03r01 – Section 6.0 - ANSI C63.26-2015 – Section 5.7
Conducted Output Power	- N/A (See SAR Report)
Peak- to- Average Ratio	- KDB 971168 D01 v03r01 – Section 5.7 - ANSI C63.26-2015 – Section 5.2.3.4
Frequency stability	- ANSI C63.26-2015 – Section 5.6
Radiated Power	- ANSI C63.26-2015 – Section 5.2.4.4 - KDB 971168 D01 v03r01 – Section 5.8
Radiated Spurious and Harmonic Emissions	- ANSI C63.26-2015 – Section 5.5.3 - KDB 971168 D01 v03r01 – Section 5.8

3.2 RADIATED POWER

Test Overview

Radiated tests are performed in the Fully-anechoic chamber.

The equipment under test is placed on a non-conductive table 3-meters away from the receive antenna.

Test Settings

1. Radiated power measurements are performed using the signal analyzer's "channel power" measurement capability for signals with continuous operation.
2. RBW = 1 – 5 % of the expected OBW, not to exceed 1 MHz
3. VBW $\geq$ 3 x RBW
4. Span = 1.5 times the OBW
5. No. of sweep points > 2 x span / RBW
6. Detector = RMS
7. Trigger is set to "free run" for signals with continuous operation with the sweep times set to "auto".
8. The integration bandwidth was roughly set equal to the measured OBW of the signal for signals with continuous operation.
9. Trace mode = trace averaging (RMS) over 100 sweeps
10. The trace was allowed to stabilize

Test Note

1. The turntable is rotated through 360 degrees, and the receiving antenna scans in order to determine the level of the maximized emission.
2. A half wave dipole is then substituted in place of the EUT. For emissions above 1 GHz, a horn antenna is substituted in place of the EUT. The substitute antenna is driven by a signal generator and the previously recorded signal was duplicated.

The power is calculated by the following formula;

$$P_d \text{ (dBm)} = P_g \text{ (dBm)} - \text{cable loss (dB)} + \text{antenna gain (dB)}$$

Where: P_d is the dipole equivalent power and P_g is the generator output power into the substitution antenna.

3. The maximum value is calculated by adding the forward power to the calibrated source plus its appropriate gain value.
These steps are repeated with the receiving antenna in both vertical and horizontal polarization. the difference between the gain of the horn and an isotropic antenna are taken into consideration
4. The EUT was tested in three orthogonal planes(X, Y, Z) and in all possible test configurations and positioning.
5. 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.

3.3 RADIATED SPURIOUS EMISSIONS

Test Overview

Radiated tests are performed in the Fully-anechoic chamber.

Radiated Spurious Emission Measurements at 3 meters by Substitution Method.

Test Settings

1. RBW = 100 kHz for emissions below 1 GHz and 1 MHz for emissions above 1 GHz
2. VBW $\geq$ 3 x RBW
3. Span = 1.5 times the OBW
4. No. of sweep points > 2 x span / RBW
5. Detector = Peak
6. Trace mode = Max Hold
7. The trace was allowed to stabilize
8. Test channel : Low/ Middle/ High
9. Frequency range : We are performed all frequency to 10th harmonics from 9 kHz.

Test Note

1. Measurements value show only up to 3 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
2. The EUT was tested in three orthogonal planes(X, Y, Z) and in all possible test configurations and positioning.
The worst case emissions are reported with the EUT positioning, modulations, RB sizes and offsets, and channel bandwidth configurations shown in the test data
3. For spurious emissions above 1 GHz, a horn antenna is substituted in place of the EUT. The substitute antenna is driven by a signal generator and the previously recorded signal was duplicated.

The spurious emissions is calculated by the following formula;

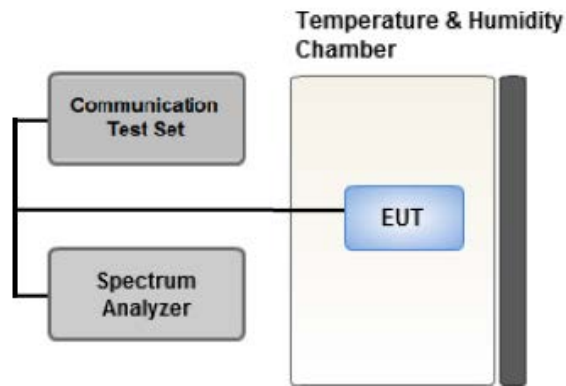
$$\text{Result}_{(\text{dBm})} = P_g_{(\text{dBm})} - \text{cable loss}_{(\text{dB})} + \text{antenna gain}_{(\text{dBi})}$$

Where: P_g is the generator output power into the substitution antenna.

If the fundamental frequency is below 1 GHz, RF output power has been converted to EIRP.

$$\text{EIRP}_{(\text{dBm})} = \text{ERP}_{(\text{dBm})} + 2.15$$

3.4 PEAK- TO- AVERAGE RATIO



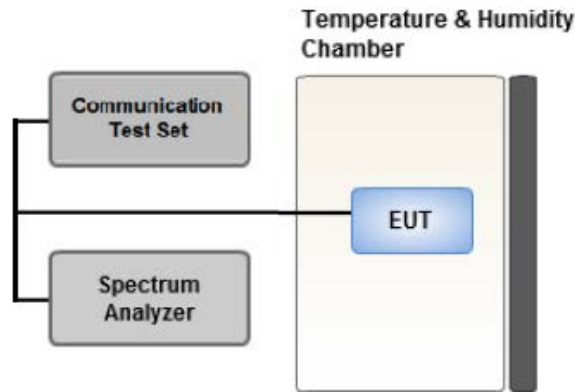
Test setup

CCDF Procedure for PAPR

Test Settings

1. Set resolution/measurement bandwidth $\geq$ signal's occupied bandwidth;
2. Set the number of counts to a value that stabilizes the measured CCDF curve;
3. Set the measurement interval as follows:
 - .- for continuous transmissions, set to 1 ms,
 - .- or burst transmissions, employ an external trigger that is synchronized with the EUT burst timing sequence, or use the internal burst trigger with a trigger level that allows the burst to stabilize and set the measurement interval to a time that is less than or equal to the burst duration.
4. Record the maximum PAPR level associated with a probability of 0.1 %.

3.5 OCCUPIED BANDWIDTH.



Test setup

The width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5 % of the total mean power of a given emission.

The EUT makes a call to the communication simulator.

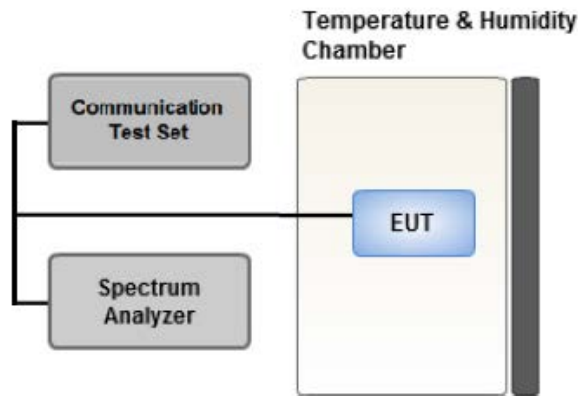
The conducted occupied bandwidth used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer.

The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency. Use OBW measurement function of Spectrum analyzer to measure 99 % occupied bandwidth

Test Settings

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

3.6 SPURIOUS AND HARMONIC EMISSIONS AT ANTENNA TERMINAL



Test setup

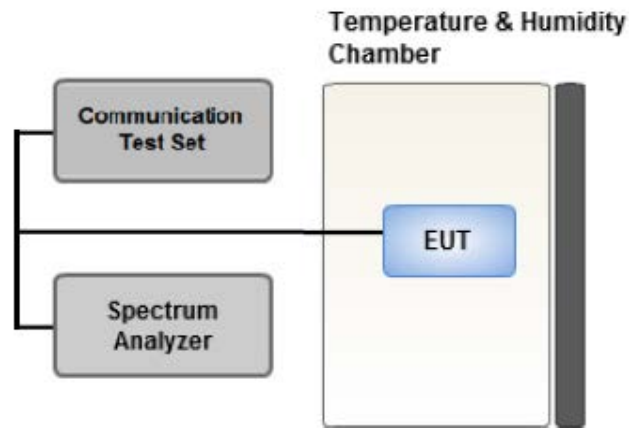
Test Overview

The level of the carrier and the various conducted spurious and harmonic frequencies is measured by means of a calibrated spectrum analyzer. The spectrum is scanned from the lowest frequency generated in the equipment up to a frequency including its 10th harmonic. All out of band 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.

Test Settings

1. RBW = 1 MHz
2. VBW $\geq$ 3 MHz
3. Detector = Peak
4. Trace Mode = Max Hold
5. Sweep time = auto
6. Number of points in sweep $\geq 2 \times \text{Span} / \text{RBW}$

3.7 BAND EDGE



Test setup

Test Overview

All out of band 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.

Test Settings

1. Start and stop frequency were set such that the band edge would be placed in the center of the plot
2. Span was set large enough so as to capture all out of band emissions near the band edge
3. RBW > 1 % of the emission bandwidth
4. VBW > 3 x RBW
5. Detector = RMS
6. Number of sweep points $\geq 2 \times \text{Span/RBW}$
7. Trace mode = trace average
8. Sweep time > Number of points in sweep Symbol period (i.e., the transmit on-time + the off-time)
9. The trace was allowed to stabilize

Test Notes

For mobile operations in the 3450-3550 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz.

Compliance with this paragraph is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater.

However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed, but limited to a maximum of 200 kHz.

In the bands between 1 and 5 MHz removed from the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be 500 kHz.

The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

For mobile operations in the 3700-3980 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz.

Measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater.

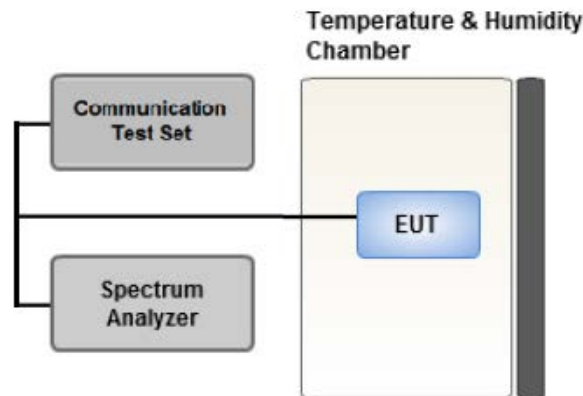
However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be either one percent of the emission bandwidth of the fundamental emission of the transmitter or 350 kHz.

In the bands between 1 and 5 MHz removed from the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be 500 kHz.

The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power. .

Where $\text{Margin} < 1$ dB the emission level is either corrected by $10 \log(1 \text{ MHz} / \text{RB})$ or the emission is integrated over a 1 MHz bandwidth to determine the final result. When using the integration method the integration window is either centered on the emission or, for emissions at the band edge, centered by an offset of 500 kHz from the block edge so that the integration window is the 1 MHz adjacent to the block edge.

3.8 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE



Test setup

Test Overview

Frequency stability testing is performed in accordance with the guidelines of ANSI C63.26-2015.

The frequency stability of the transmitter is measured by:

1. Temperature: The temperature is varied from -30 °C to +50 °C in 10 °C increments using an environmental chamber.
2. Primary Supply Voltage:
 - .- Unless otherwise specified, vary primary supply voltage from 85 % to 115 % of the nominal value for other than hand carried battery equipment.
 - .- For hand carried, battery powered equipment, reduce the primary ac or dc supply voltage to the battery operating end point, which shall be specified by the manufacturer.

Test Settings

1. The carrier frequency of the transmitter is measured at room temperature (20 °C to provide a reference).
2. The equipment is turned on in a “standby” condition for fifteen minutes before applying power to the transmitter.

Measurement of the carrier frequency of the transmitter is made within one minute after applying power to the transmitter.
3. Frequency measurements are made at 10 °C intervals ranging from -30 °C to +50 °C. A period of at least one half-hour is provided to allow stabilization of the equipment at each temperature level.

3.9 WORST CASE(RADIATED TEST)

- The EUT was tested in three orthogonal planes(X, Y, Z) and in all possible test configurations and positioning.
- The worst case is reported with the EUT positioning, modulations, and paging service configurations shown in the test data.
- All modes of operation were investigated and the worst case configuration results are reported.
Mode: SA, NSA (Worst case: SA)
- NR n77 (3450 – 3550 MHz / 3700 – 3980 MHz) overlaps the entire frequency range of NR n78 (3700 – 3800 MHz).
- All power classes were tested, and the results were reported for the worst case PC2(n77).
- Radiated Spurious emissions are measured while operating in EN-DC mode with Sub 6 NR carrier as well as an LTE carrier (anchor).

All EN-DC mode of operation (=anchor) were investigated and the test results were measured No Peak Found.

The test results which are attenuated more than 20 dB below the permissible value, so it was not reported.

- The worst case is reported with the EUT positioning, modulations, and paging service configurations shown in the test data.
- All RB sizes, offsets of operation were investigated and the worst case configuration results are reported. Please refer to the table below.
- In the case of radiated spurious emissions, all bandwidth of operation were investigated and the worst case bandwidth results are reported.

Worst case:

1. 20 MHz(MIMO1, 3450 MHz - 3550 MHz)
 2. 60 MHz(MIMO2, 3450 MHz - 3550 MHz)
 3. 40 MHz(MIMO1, 3700 MHz - 3980 MHz)
 4. 20 MHz(MIMO1, 3700 MHz - 3980 MHz)
- MIMO3 and MIMO4 have three types of Rx antennas. Operating modes were investigated for all Rx antennas, and the worst-case configuration results were reported. (Worst-case: FSA antenna)

[Worst case (MIMO1, 3450 MHz - 3550 MHz)]

Test Description	Modulation	RB size	RB offset	Axis
Equivalent Isotropic Radiated Power	PI/2 BPSK, QPSK, 16QAM, 64 QAM, 256 QAM	See Section 8.1		Z
Radiated Spurious and Harmonic Emissions	PI/2 BPSK	See Section 8.2		Z

[Worst case (MIMO1, 3700 MHz - 3980 MHz)]

Test Description	Modulation	RB size	RB offset	Axis
Equivalent Isotropic Radiated Power	PI/2 BPSK, QPSK, 16QAM, 64 QAM, 256 QAM	See Section 9.1		Z
Radiated Spurious and Harmonic Emissions	PI/2 BPSK	See Section 9.2		X

[Worst case (MIMO2, 3450 MHz - 3550 MHz)]

Test Description	Modulation	RB size	RB offset	Axis
Equivalent Isotropic Radiated Power	PI/2 BPSK, QPSK, 16QAM, 64 QAM, 256 QAM	See Section 10.1		Y
Radiated Spurious and Harmonic Emissions	PI/2 BPSK	See Section 10.2		Y

[Worst case (MIMO2, 3700 MHz - 3980 MHz)]

Test Description	Modulation	RB size	RB offset	Axis
Equivalent Isotropic Radiated Power	PI/2 BPSK, QPSK, 16QAM, 64 QAM, 256 QAM	See Section 11.1		Y
Radiated Spurious and Harmonic Emissions	PI/2 BPSK	See Section 11.2		X

3.10 WORST CASE(CONDUCTED TEST)

- Waveform : All Waveform of operation were investigated and the worst case configuration results are reported. (Worst case: DFT-S-OFDM)
- Modulation : All Modulation of operation were investigated and the worst case configuration results are reported. (Worst case: PI/2 BPSK)
- NR n77 (3450 – 3550 MHz / 3700 – 3980 MHz) overlaps the entire frequency range of NR n78 (3700 – 3800 MHz).
- All power classes were tested, and the results were reported for the worst case PC2(n77).
- All modes of operation were investigated and the worst case configuration results are reported.
Mode: SA, NSA (Worst case: SA)
- All RB sizes, offsets of operation were investigated and the worst case configuration results are reported.
Please refer to the table below.
- Both 85% and 115% conditions were measured for the Frequency Stability test, and results for the worst-case configuration (85%) were reported.
- In accordance with the customer's specification of 3.7V as the lowest operating voltage, testing was performed at 3.7V instead of 85% (3.57V).

[Worst case]

Test Description	Modulation	Bandwidth (MHz)	Frequency	RB size	RB offset
Occupied Bandwidth,	PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100	Mid	Full RB	0
Peak-To-Average Ratio	PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100	Mid	Full RB	0
Band Edge	PI/2 BPSK	10	Low	1	0
			High	1	23
		15	Low	1	0
			High	1	37
		20	Low	1	0
			High	1	50
		25	Low	1	0
			High	1	64
		30	Low	1	0
			High	1	77
		40	Low	1	0
			High	1	105
		50	Low	1	0
			High	1	132
		60	Low	1	0
			High	1	161
		70	Low	1	0
			High	1	188
		80	Low	1	0
			High	1	216
		90	Low	1	0
			High	1	244
		100	Low	1	0
			High	1	272
		10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100	Low, High	Full RB	0
Spurious and Harmonic Emissions at Antenna Terminal	PI/2 BPSK	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100	Low, Mid, High	1	1

4. LIST OF TEST EQUIPMENT

[Radiated]

Equipment	Model	Manufacturer	Serial No.	Due to Calibration	Calibration Interval
RF Switch System	FBSR-04C(3G HPF+LNA)	TNM System	S4L1	03/12/2026	Annual
RF Switch System	FBSR-04C(7G HPF+LNA)	TNM System	S4L5	03/12/2026	Annual
RF Switch System	FBSR-04C(LNA)	TNM System	S4L4	03/12/2026	Annual
RF Switch System	FBSR-04C(Thru)	TNM System	S4L6	03/12/2026	Annual
Antenna Position Tower	MA4640	Innco systems	S4AM	08/07/2025	Annual
Turn Table	DS2000-S	Innco systems	N/A	N/A	-
Controller (Antenna mast & Turn Table)	CO3000	Innco systems	CO3000/1251/48920320/P	N/A	-
Amp & Filter Bank Switch Controller	FBSM-01B	TNM system	TM20090002	N/A	-
RF Switching System	Switch box(1 G HPF+LNA)	HCT CO., LTD.,	F2L2	12/12/2025	Annual
RF Switching System	Switch box(3 G HPF+LNA)	HCT CO., LTD.,	F2L3	12/12/2025	Annual
RF Switching System	Switch box(LNA)	HCT CO., LTD.,	F2L5	12/12/2025	Annual
RF Switching System	Switch box(6 G HPF+LNA)	HCT CO., LTD.,	F2L14	12/12/2025	Annual
HIGHPASS FILTER	WHKX10-900-1000-15000-40SS	WAINWRIGHT INSTRUMENTS	16	07/24/2025	Annual
LOW NOISE AMPLIFIER	310N	SONOMA Instrument	186169	02/05/2026	Annual
LOW NOISE AMPLIFIER	TK-PA1840H	TESTEK	170011-L	10/11/2025	Annual
Power Amplifier	CBL18265035	CERNEX	22966	11/07/2025	Annual
Power Amplifier	CBL26405040	CERNEX	25956	02/19/2026	Annual
Power Splitter(DC ~ 26.5 GHz)	11667B	Hewlett Packard	5001	04/10/2026	Annual
DC Power Supply	E3632A	Agilent	MY40010147	08/06/2025	Annual
Dipole Antenna	UHAP	Schwarzbeck	01274	03/10/2026	Biennial
Dipole Antenna	UHAP	Schwarzbeck	01288	08/07/2026	Biennial
Horn Antenna(1 ~ 18 GHz)	BBHA 9120D	Schwarzbeck	03197	11/28/2025	Biennial
Horn Antenna(1 ~ 18 GHz)	BBHA 9120D	Schwarzbeck	03201	11/28/2025	Biennial
Horn Antenna(1 ~ 18 GHz)	BBHA 9120	Schwarzbeck	937	02/07/2027	Biennial
Horn Antenna(15 ~ 40 GHz)	BBHA 9170	Schwarzbeck	BBHA9170124	03/23/2027	Biennial
Horn Antenna(15 ~ 40 GHz)	BBHA 9170	Schwarzbeck	BBHA9170342	09/20/2026	Biennial

Equipment	Model	Manufacturer	Serial No.	Due to Calibration	Calibration Interval
Spectrum Analyzer(10 Hz ~ 40 GHz)	FSV40	ROHDE & SCHWARZ	101733	09/19/2025	Annual
Spectrum Analyzer(10 Hz ~ 40 GHz)	FSV40	REOHDE & SCHWARZ	101436	02/04/2026	Annual
Signal & Spectrum Analyzer (2 Hz~67 GHz)	FSW67	REOHDE & SCHWARZ	101736	05/27/2026	Annual
Base Station	8960 (E5515C)	Agilent	MY48360800	08/05/2025	Annual
Loop Antenna(9 kHz ~ 30 MHz)	FMZB1513	Schwarzbeck	1513-333	03/07/2026	Biennial
Trilog Broadband Antenna	VULB 9168	Schwarzbeck	9168-0895	08/28/2026	Biennial
Trilog Broadband Antenna	VULB9168	Schwarzbeck	895	08/28/2026	Biennial
Trilog Broadband Antenna	VULB9168	Schwarzbeck	1135	08/19/2026	Biennial
Wideband Radio Communication Tester	MT8821C	Anritsu Corp.	6262287701	05/14/2026	Annual
Wideband Radio Communication Tester	MT8000A	Anritsu Corp.	6272613402	08/28/2025	Annual
SIGNAL GENERATOR (100 kHz ~ 40 GHz)	SMB100A	REOHDE & SCHWARZ	177633	07/26/2025	Annual
Automation Software	FCC LTE Radiated	HCT CO., LTD	-	-	-
Automation Software	FCC NR Radiated	HCT CO., LTD	-	-	-

[Conducted]

Equipment	Model	Manufacturer	Serial No.	Due to Calibration	Calibration Interval
Power Splitter (DC ~ 26.5 GHz)	11667B	Hewlett Packard	5001	04/10/2026	Annual
DC Power Supply	E3632A	Agilent	MY40010147	08/06/2025	Annual
Chamber	SU-642	ESPEC	93008124	02/11/2026	Annual
ATTENUATOR (20 dB)	8493C	Hewlett Packard	17280	04/10/2026	Annual
Base Station	8960 (E5515C)	Agilent	MY48360800	08/05/2025	Annual
Wideband Radio Communication Tester	MT8821C	Anritsu Corp.	6262094331	11/13/2025	Annual
UXM 5G Wireless Test Platform	E7515B	KEYSIGHT	MY60101126	02/10/2026	Annual
Signal Analyzer (2 Hz ~ 50.0 GHz)	N9030B	KEYSIGHT	MY56320554	02/03/2026	Annual
FCC LTE Mobile Conducted RF Automation Test Software	-	HCT CO., LTD.	-	-	-
Automation Software	FCC 2G/3G/4G Conducted	HCT CO., LTD	-	-	-
Automation Software	FCC NR Conducted	HCT CO., LTD	-	-	-

Note:

1. Equipment listed above that has a calibration due date during the testing period, the testing is completed before equipment expiration date.
2. Especially, all antenna for measurement is calibrated in accordance with the requirements of C63.5 (Version : 2017).

5. 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 data shown herein 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.

Parameter	Expanded Uncertainty ($\pm$ kHz)
Occupied Bandwidth	95 (Confidence level about 95 %, $k=2$)
Frequency stability	28 (Confidence level about 95 %, $k=2$)

Parameter	Expanded Uncertainty ($\pm$ dB)
Block Edge	0.70 (Confidence level about 95 %, $k=2$)
Conducted Spurious Emissions	1.18 (Confidence level about 95 %, $k=2$)
Peak- to- Average Ratio	0.68 (Confidence level about 95 %, $k=2$)
Radiated Power	4.74 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (9 kHz ~ 30 MHz)	4.36 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (30 MHz ~ 1 GHz)	5.68 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (1 GHz ~ 18 GHz)	5.75 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (18 GHz ~ 40 GHz)	5.82 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (Above 40 GHz)	5.58 (Confidence level about 95 %, $k=2$)

6. SUMMARY OF TEST RESULTS

-. The decision rule applies 'simple acceptance'

6.1 Test Condition : Conducted Test

Test Description	FCC Part Section(s)	Test Limit	Test Result
Occupied Bandwidth	§ 2.1049	N/A	PASS
Band Edge / Spurious and Harmonic Emissions at Antenna Terminal.	§ 2.1051, § 27.53(n)(2), § 27.53(l)(2)	< -13 dBm	PASS
Conducted Output Power	§ 2.1046	N/A	Note ¹
Peak- to- Average Ratio	§ 27.50(k)(4), § 27.50(j)(4)	< 13 dB	PASS
Frequency stability / variation of ambient temperature	§ 2.1055, § 27.54	Emission must remain in band	PASS

Note:

1. Refer to the SAR report.
2. All conducted tests were tested using 5G Wireless Tester.

6.2 Test Condition : Radiated Test

Test Description	FCC Part Section(s)	Test Limit	Test Result
Equivalent Isotropic Radiated Power	§ 27.50(k)(3), § 27.50(j)(3)	< 1 Watts max. EIRP	PASS
Radiated Spurious and Harmonic Emissions	§ 2.1051, § 27.53(n)(2), § 27.53(l)(2)	< -13 dBm	PASS

Note:

1. Radiated tests were tested using 5G Wireless Tester.

7. SAMPLE CALCULATION

7.1 ERP Sample Calculation

Ch./ Freq.		Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBd)	C.L	Pol.	ERP	
channel	Freq.(MHz)						W	dBm
128	824.20	-21.37	38.40	-10.61	0.95	H	0.483	26.84

$$\text{ERP} = \text{Substitute LEVEL(dBm)} + \text{Ant. Gain} - \text{CL(Cable Loss)}$$

- 1) The EUT mounted on a non-conductive turntable is 2.5 meter above test site ground level.
- 2) During the test, the turn table is rotated until the maximum signal is found.
- 3) Record the field strength meter's level.
- 4) Replace the EUT with dipole/Horn antenna that is connected to a calibrated signal generator.
- 5) Increase the signal generator output till the field strength meter's level is equal to the item (3).
- 6) The signal generator output level with Ant. Gain and cable loss are the rating of effective radiated power.

7.2 EIRP Sample Calculation

Ch./ Freq.		Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	EIRP	
channel	Freq.(MHz)						W	dBm
20175	1,732.50	-15.75	18.45	9.90	1.76	H	0.456	26.59

$$\text{EIRP} = \text{Substitute LEVEL(dBm)} + \text{Ant. Gain} - \text{CL(Cable Loss)}$$

- 1) The EUT mounted on a non-conductive turntable is 2.5 meter above test site ground level.
- 2) During the test, the turn table is rotated until the maximum signal is found.
- 3) Record the field strength meter's level.
- 4) Replace the EUT with dipole/Horn antenna that is connected to a calibrated signal generator.
- 5) Increase the signal generator output till the field strength meter's level is equal to the item (3).
- 6) The signal generator output level with Ant. Gain and cable loss are the rating of equivalent isotropic radiated power.

7.3. Emission Designator

GSM Emission Designator

Emission Designator = 249KGXW

GSM BW = 249 kHz

G = Phase Modulation

X = Cases not otherwise covered

W = Combination (Audio/Data)

EDGE Emission Designator

Emission Designator = 249KG7W

GSM BW = 249 kHz

G = Phase Modulation

7 = Quantized/Digital Info

W = Combination (Audio/Data)

WCDMA Emission Designator

Emission Designator = 4M17F9W

WCDMA BW = 4.17 MHz

F = Frequency Modulation

9 = Composite Digital Info

W = Combination (Audio/Data)

QPSK Modulation

Emission Designator = 4M48G7D

LTE BW = 4.48 MHz

G = Phase Modulation

7 = Quantized/Digital Info

D = Data transmission; telemetry; telecommand

QAM Modulation

Emission Designator = 4M48W7D

LTE BW = 4.48 MHz

W = Amplitude/Angle Modulated

7 = Quantized/Digital Info

D = Data transmission; telemetry; telecommand

8. TEST DATA (MIMO1, 3450 MHz - 3550 MHz)

8.1 EQUIVALENT ISOTROPIC RADIATED POWER

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3455.01	Sub6 n77/ 10 MHz [30 kHz]	PI/2 BPSK	-27.23	13.70	11.47	3.04	H	< 1.00	0.163	22.13	1	12
		QPSK	-27.39	13.54	11.47	3.04	H		0.157	21.97		
		16-QAM	-28.34	12.59	11.47	3.04	H		0.126	21.02		
		64-QAM	-29.72	11.21	11.47	3.04	H		0.092	19.64		
		256-QAM	-31.70	9.23	11.47	3.04	H		0.058	17.66		
3500.01		PI/2 BPSK	-26.03	14.84	11.59	3.04	H		0.218	23.39	1	22
		QPSK	-26.35	14.52	11.59	3.04	H		0.203	23.07		
		16-QAM	-27.14	13.73	11.59	3.04	H		0.169	22.28		
		64-QAM	-28.54	12.33	11.59	3.04	H		0.122	20.88		
		256-QAM	-30.48	10.39	11.59	3.04	H		0.078	18.94		
3544.99		PI/2 BPSK	-25.89	14.89	11.65	3.07	H		0.222	23.47	1	1
		QPSK	-25.92	14.86	11.65	3.07	H		0.221	23.44		
		16-QAM	-27.10	13.68	11.65	3.07	H		0.168	22.26		
		64-QAM	-28.52	12.26	11.65	3.07	H		0.121	20.84		
		256-QAM	-30.41	10.37	11.65	3.07	H		0.079	18.95		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3457.50	Sub6 n77/ 15 MHz [30 kHz]	PI/2 BPSK	-26.24	14.69	11.48	3.04	H	< 1.00	0.206	23.13	1	1
		QPSK	-27.66	13.27	11.48	3.04	H		0.148	21.71		
		16-QAM	-28.46	12.47	11.48	3.04	H		0.123	20.91		
		64-QAM	-30.69	10.24	11.48	3.04	H		0.074	18.68		
		256-QAM	-31.91	9.02	11.48	3.04	H		0.056	17.46		
3500.01		PI/2 BPSK	-26.36	14.51	11.59	3.04	H		0.202	23.06	1	1
		QPSK	-26.45	14.42	11.59	3.04	H		0.198	22.97		
		16-QAM	-27.58	13.29	11.59	3.04	H		0.153	21.84		
		64-QAM	-28.85	12.02	11.59	3.04	H		0.114	20.57		
		256-QAM	-31.01	9.86	11.59	3.04	H		0.069	18.41		
3542.50		PI/2 BPSK	-25.82	14.96	11.65	3.07	H		0.226	23.54	1	1
		QPSK	-25.93	14.85	11.65	3.07	H		0.220	23.43		
		16-QAM	-27.02	13.76	11.65	3.07	H		0.171	22.34		
		64-QAM	-27.85	12.93	11.65	3.07	H		0.142	21.51		
		256-QAM	-29.98	10.80	11.65	3.07	H		0.087	19.38		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3460.02	Sub6 n77/ 20 MHz [30 kHz]	PI/2 BPSK	-26.87	14.06	11.48	3.04	H	< 1.00	0.178	22.50	1	49
		QPSK	-27.28	13.65	11.48	3.04	H		0.162	22.09		
		16-QAM	-28.23	12.70	11.48	3.04	H		0.130	21.14		
		64-QAM	-29.64	11.29	11.48	3.04	H		0.094	19.73		
		256-QAM	-31.67	9.26	11.48	3.04	H		0.059	17.70		
3500.01		PI/2 BPSK	-25.78	15.09	11.59	3.04	H		0.231	23.64	1	49
		QPSK	-25.99	14.88	11.59	3.04	H		0.220	23.43		
		16-QAM	-26.97	13.90	11.59	3.04	H		0.176	22.45		
		64-QAM	-28.22	12.65	11.59	3.04	H		0.132	21.20		
		256-QAM	-30.18	10.69	11.59	3.04	H		0.084	19.24		
3540.00		PI/2 BPSK	-25.48	15.31	11.64	3.06	H		0.245	23.89	1	1
		QPSK	-25.73	15.06	11.64	3.06	H		0.231	23.64		
		16-QAM	-26.63	14.16	11.64	3.06	H		0.188	22.74		
		64-QAM	-27.97	12.82	11.64	3.06	H		0.138	21.40		
		256-QAM	-29.94	10.85	11.64	3.06	H		0.088	19.43		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3462.50	Sub6 n77/ 25 MHz [30 kHz]	PI/2 BPSK	-27.31	13.61	11.50	3.02	H	< 1.00	0.162	22.09	1	63
		QPSK	-27.42	13.50	11.50	3.02	H		0.158	21.98		
		16-QAM	-28.26	12.66	11.50	3.02	H		0.130	21.14		
		64-QAM	-30.23	10.69	11.50	3.02	H		0.083	19.17		
		256-QAM	-32.12	8.80	11.50	3.02	H		0.053	17.28		
3500.01		PI/2 BPSK	-25.90	14.97	11.59	3.04	H		0.225	23.52	1	63
		QPSK	-25.97	14.90	11.59	3.04	H		0.221	23.45		
		16-QAM	-26.59	14.28	11.59	3.04	H		0.192	22.83		
		64-QAM	-28.15	12.72	11.59	3.04	H		0.134	21.27		
		256-QAM	-30.21	10.66	11.59	3.04	H		0.083	19.21		
3537.50		PI/2 BPSK	-25.48	15.31	11.64	3.06	H		0.245	23.89	1	1
		QPSK	-25.68	15.11	11.64	3.06	H		0.234	23.69		
		16-QAM	-26.55	14.24	11.64	3.06	H		0.191	22.82		
		64-QAM	-28.09	12.70	11.64	3.06	H		0.134	21.28		
		256-QAM	-30.13	10.66	11.64	3.06	H		0.084	19.24		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3465.00	Sub6 n77/ 30 MHz [30 kHz]	PI/2 BPSK	-26.88	14.04	11.50	3.02	H	< 1.00	0.179	22.52	1	76
		QPSK	-26.95	13.97	11.50	3.02	H		0.176	22.45		
		16-QAM	-27.92	13.00	11.50	3.02	H		0.141	21.48		
		64-QAM	-29.39	11.53	11.50	3.02	H		0.100	20.01		
		256-QAM	-31.47	9.45	11.50	3.02	H		0.062	17.93		
3500.01		PI/2 BPSK	-25.83	15.04	11.59	3.04	H		0.229	23.59	1	76
		QPSK	-25.87	15.00	11.59	3.04	H		0.226	23.55		
		16-QAM	-27.41	13.46	11.59	3.04	H		0.159	22.01		
		64-QAM	-29.26	11.61	11.59	3.04	H		0.104	20.16		
		256-QAM	-30.40	10.47	11.59	3.04	H		0.080	19.02		
3534.99		PI/2 BPSK	-25.67	15.11	11.64	3.05	H		0.234	23.70	1	39
		QPSK	-25.72	15.06	11.64	3.05	H		0.232	23.65		
		16-QAM	-26.51	14.27	11.64	3.05	H		0.193	22.86		
		64-QAM	-28.03	12.75	11.64	3.05	H		0.136	21.34		
		256-QAM	-30.09	10.69	11.64	3.05	H		0.085	19.28		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3470.01	Sub6 n77/ 40 MHz [30 kHz]	PI/2 BPSK	-26.44	14.49	11.51	3.01	H	< 1.00	0.199	22.99	1	104
		QPSK	-26.51	14.42	11.51	3.01	H		0.196	22.92		
		16-QAM	-27.55	13.38	11.51	3.01	H		0.154	21.88		
		64-QAM	-29.25	11.68	11.51	3.01	H		0.104	20.18		
		256-QAM	-31.09	9.84	11.51	3.01	H		0.068	18.34		
3500.01		PI/2 BPSK	-26.00	14.87	11.59	3.04	H		0.220	23.42	1	104
		QPSK	-26.16	14.71	11.59	3.04	H		0.212	23.26		
		16-QAM	-30.50	10.37	11.59	3.04	H		0.078	18.92		
		64-QAM	-28.73	12.14	11.59	3.04	H		0.117	20.69		
		256-QAM	-30.68	10.19	11.59	3.04	H		0.075	18.74		
3529.98		PI/2 BPSK	-25.53	15.27	11.63	3.05	H		0.243	23.85	1	1
		QPSK	-25.78	15.02	11.63	3.05	H		0.229	23.60		
		16-QAM	-26.71	14.09	11.63	3.05	H		0.185	22.67		
		64-QAM	-28.06	12.74	11.63	3.05	H		0.136	21.32		
		256-QAM	-29.89	10.91	11.63	3.05	H		0.089	19.49		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3475.02	Sub6 n77/ 50 MHz [30 kHz]	PI/2 BPSK	-26.58	14.35	11.52	3.02	H	< 1.00	0.193	22.85	1	131
		QPSK	-26.69	14.24	11.52	3.02	H		0.188	22.74		
		16-QAM	-27.36	13.57	11.52	3.02	H		0.161	22.07		
		64-QAM	-28.75	12.18	11.52	3.02	H		0.117	20.68		
		256-QAM	-30.73	10.20	11.52	3.02	H		0.074	18.70		
3500.01		PI/2 BPSK	-25.99	14.88	11.59	3.04	H		0.220	23.43	1	131
		QPSK	-26.00	14.87	11.59	3.04	H		0.220	23.42		
		16-QAM	-27.06	13.81	11.59	3.04	H		0.172	22.36		
		64-QAM	-28.40	12.47	11.59	3.04	H		0.126	21.02		
		256-QAM	-30.23	10.64	11.59	3.04	H		0.083	19.19		
3525.00		PI/2 BPSK	-25.65	15.15	11.62	3.04	H		0.236	23.73	1	66
		QPSK	-25.72	15.08	11.62	3.04	H		0.232	23.66		
		16-QAM	-26.59	14.21	11.62	3.04	H		0.190	22.79		
		64-QAM	-28.02	12.78	11.62	3.04	H		0.137	21.36		
		256-QAM	-29.85	10.95	11.62	3.04	H		0.090	19.53		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3480.00	Sub6 n77/ 60 MHz [30 kHz]	PI/2 BPSK	-26.12	14.80	11.54	3.02	H	< 1.00	0.215	23.32	1	160
		QPSK	-26.16	14.76	11.54	3.02	H		0.213	23.28		
		16-QAM	-27.19	13.73	11.54	3.02	H		0.168	22.25		
		64-QAM	-28.79	12.13	11.54	3.02	H		0.116	20.65		
		256-QAM	-30.50	10.42	11.54	3.02	H		0.078	18.94		
3500.01		PI/2 BPSK	-25.95	14.92	11.59	3.04	H		0.222	23.47	1	160
		QPSK	-26.08	14.79	11.59	3.04	H		0.216	23.34		
		16-QAM	-26.97	13.90	11.59	3.04	H		0.176	22.45		
		64-QAM	-28.82	12.05	11.59	3.04	H		0.115	20.60		
		256-QAM	-30.48	10.39	11.59	3.04	H		0.078	18.94		
3519.99		PI/2 BPSK	-25.62	15.18	11.62	3.04	H		0.238	23.76	1	82
		QPSK	-25.67	15.13	11.62	3.04	H		0.235	23.71		
		16-QAM	-26.72	14.08	11.62	3.04	H		0.185	22.66		
		64-QAM	-28.02	12.78	11.62	3.04	H		0.137	21.36		
		256-QAM	-30.14	10.66	11.62	3.04	H		0.084	19.24		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3485.01	Sub6 n77/ 70 MHz [30 kHz]	PI/2 BPSK	-25.90	15.03	11.55	3.03	H	< 1.00	0.226	23.55	1	187
		QPSK	-26.02	14.91	11.55	3.03	H		0.220	23.43		
		16-QAM	-27.16	13.77	11.55	3.03	H		0.169	22.29		
		64-QAM	-28.36	12.57	11.55	3.03	H		0.129	21.09		
		256-QAM	-30.31	10.62	11.55	3.03	H		0.082	19.14		
3500.01		PI/2 BPSK	-25.91	14.96	11.59	3.04	H		0.224	23.51	1	187
		QPSK	-26.17	14.70	11.59	3.04	H		0.211	23.25		
		16-QAM	-27.11	13.76	11.59	3.04	H		0.170	22.31		
		64-QAM	-28.47	12.40	11.59	3.04	H		0.124	20.95		
		256-QAM	-30.20	10.67	11.59	3.04	H		0.084	19.22		
3514.98		PI/2 BPSK	-25.62	15.19	11.61	3.04	H		0.238	23.76	1	94
		QPSK	-25.64	15.17	11.61	3.04	H		0.237	23.74		
		16-QAM	-26.41	14.40	11.61	3.04	H		0.198	22.97		
		64-QAM	-27.93	12.88	11.61	3.04	H		0.140	21.45		
		256-QAM	-29.62	11.19	11.61	3.04	H		0.095	19.76		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3490.02	Sub6 n77/ 80 MHz [30 kHz]	PI/2 BPSK	-25.64	15.29	11.56	3.04	H	< 1.00	0.240	23.81	1	215
		QPSK	-25.74	15.19	11.56	3.04	H		0.235	23.71		
		16-QAM	-27.04	13.89	11.56	3.04	H		0.174	22.41		
		64-QAM	-28.21	12.72	11.56	3.04	H		0.133	21.24		
		256-QAM	-30.23	10.70	11.56	3.04	H		0.084	19.22		
3500.01		PI/2 BPSK	-26.38	14.49	11.59	3.04	H		0.201	23.04	1	215
		QPSK	-26.44	14.43	11.59	3.04	H		0.199	22.98		
		16-QAM	-27.61	13.26	11.59	3.04	H		0.152	21.81		
		64-QAM	-28.72	12.15	11.59	3.04	H		0.117	20.70		
		256-QAM	-30.60	10.27	11.59	3.04	H		0.076	18.82		
3510.00		PI/2 BPSK	-25.82	15.00	11.60	3.05	H		0.226	23.55	1	108
		QPSK	-25.96	14.86	11.60	3.05	H		0.219	23.41		
		16-QAM	-26.82	14.00	11.60	3.05	H		0.180	22.55		
		64-QAM	-28.09	12.73	11.60	3.05	H		0.134	21.28		
		256-QAM	-29.94	10.88	11.60	3.05	H		0.088	19.43		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3495.00	Sub6 n77/ 90 MHz [30 kHz]	PI/2 BPSK	-25.98	14.93	11.57	3.04	H	< 1.00	0.222	23.46	1	243
		QPSK	-26.19	14.72	11.57	3.04	H		0.211	23.25		
		16-QAM	-27.28	13.63	11.57	3.04	H		0.164	22.16		
		64-QAM	-28.56	12.35	11.57	3.04	H		0.122	20.88		
		256-QAM	-30.44	10.47	11.57	3.04	H		0.079	19.00		
3500.01		PI/2 BPSK	-26.19	14.68	11.59	3.04	H		0.210	23.23	1	243
		QPSK	-26.53	14.34	11.59	3.04	H		0.195	22.89		
		16-QAM	-27.81	13.06	11.59	3.04	H		0.145	21.61		
		64-QAM	-28.81	12.06	11.59	3.04	H		0.115	20.61		
		256-QAM	-30.51	10.36	11.59	3.04	H		0.078	18.91		
3504.99		PI/2 BPSK	-25.59	15.27	11.59	3.05	H		0.240	23.81	1	122
		QPSK	-25.87	14.99	11.59	3.05	H		0.225	23.53		
		16-QAM	-28.26	12.60	11.59	3.05	H		0.130	21.14		
		64-QAM	-28.33	12.53	11.59	3.05	H		0.128	21.07		
		256-QAM	-30.14	10.72	11.59	3.05	H		0.084	19.26		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3500.01	Sub6 n77/ 100 MHz [30 kHz]	PI/2 BPSK	-26.61	14.26	11.59	3.04	H	< 1.00	0.191	22.81	1	136
		QPSK	-26.30	14.57	11.59	3.04	H		0.205	23.12		
		16-QAM	-30.80	10.07	11.59	3.04	H		0.073	18.62		
		64-QAM	-28.87	12.00	11.59	3.04	H		0.114	20.55		
		256-QAM	-30.96	9.91	11.59	3.04	H		0.070	18.46		

8.2 RADIATED SPURIOUS EMISSIONS

NR Band:	<u>N77</u>
Bandwidth:	<u>20 MHz</u>
Modulation:	<u>PI/2 BPSK</u>
Distance:	<u>1 meters</u>
SCS:	<u>30 kHz</u>

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
630668 (3460.02)	6 920.04	-54.68	11.19	-57.19	4.39	V	-50.39	-13.00	1	49
	10 380.06	-53.56	11.68	-53.08	5.56	V	-46.96	-13.00		
	13 840.08	-60.50	13.35	-49.14	6.53	H	-42.32	-13.00		
	17 300.10	-61.45	17.76	-40.63	7.42	H	-30.29	-13.00		
633334 (3500.01)	7 000.02	-49.17	11.14	-51.77	4.45	V	-45.08	-13.00	1	49
	10 500.03	-54.16	11.71	-54.57	5.64	H	-48.50	-13.00		
	14 000.04	-59.83	13.09	-47.91	6.55	H	-41.37	-13.00		
	17 500.05	-62.68	17.36	-37.63	7.42	V	-27.69	-13.00		
636000 (3540.00)	7 080.00	-46.75	10.90	-48.92	4.49	H	-42.51	-13.00	1	1
	10 620.00	-54.26	11.62	-54.92	5.65	V	-48.95	-13.00		
	14 160.00	-61.40	13.01	-47.79	6.51	H	-41.29	-13.00		
	17 700.00	-61.67	16.62	-33.70	7.49	V	-24.57	-13.00		

8.3 PEAK-TO-AVERAGE RATIO

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (dB)	Limit (dB)
Sub6 n77	10 MHz	3500.01	BPSK	Full RB	0	4.51	13.00
			QPSK			5.71	
			16-QAM			6.47	
			64-QAM			6.51	
			256-QAM			6.78	
	15 MHz		BPSK			4.80	
			QPSK			5.75	
			16-QAM			6.56	
			64-QAM			6.54	
			256-QAM			6.64	
	20 MHz		BPSK			4.71	
			QPSK			5.85	
			16-QAM			6.29	
			64-QAM			6.68	
			256-QAM			6.76	
	25 MHz		BPSK			5.31	
			QPSK			5.81	
			16-QAM			6.34	
			64-QAM			6.63	
			256-QAM			6.78	
	30 MHz		BPSK			4.84	
			QPSK			5.72	
			16-QAM			6.48	
			64-QAM			6.66	
			256-QAM			6.72	
	40 MHz		BPSK			4.60	
			QPSK			5.78	
			16-QAM			6.38	
			64-QAM			6.67	
			256-QAM			6.82	
	50 MHz		BPSK			5.05	
			QPSK			5.79	
			16-QAM			6.46	
			64-QAM			6.59	
			256-QAM			6.73	

	60 MHz	BPSK			6.09
		QPSK			6.33
		16-QAM			6.72
		64-QAM			6.70
		256-QAM			6.81
	70 MHz	BPSK			4.52
		QPSK			5.72
		16-QAM			6.46
		64-QAM			6.60
		256-QAM			6.71
	80 MHz	BPSK			4.50
		QPSK			5.75
		16-QAM			6.49
		64-QAM			6.57
		256-QAM			6.74
	90 MHz	BPSK			4.50
		QPSK			5.72
		16-QAM			6.52
		64-QAM			6.70
		256-QAM			6.71
	100 MHz	BPSK			5.07
		QPSK			5.75
		16-QAM			6.48
		64-QAM			6.65
		256-QAM			6.76

Note:

1. Plots of the EUT's Peak- to- Average Ratio are shown Page 158 ~ 217.

8.4 OCCUPIED BANDWIDTH

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (MHz)
Sub6 n77	10 MHz	3500.01	BPSK	Full RB	0	8.6402
			QPSK			8.6064
			16-QAM			8.6284
			64-QAM			8.6515
			256-QAM			8.6063
	15 MHz		BPSK			12.912
			QPSK			12.959
			16-QAM			12.954
			64-QAM			12.890
			256-QAM			12.945
	20 MHz		BPSK			17.964
			QPSK			17.805
			16-QAM			17.992
			64-QAM			17.900
			256-QAM			17.880
	25 MHz		BPSK			22.996
			QPSK			22.792
			16-QAM			22.947
			64-QAM			22.895
			256-QAM			22.845
	30 MHz		BPSK			26.849
			QPSK			26.830
			16-QAM			26.850
			64-QAM			26.880
			256-QAM			26.860
	40 MHz		BPSK			35.815
			QPSK			35.899
			16-QAM			35.780
			64-QAM			35.785
			256-QAM			35.764
	50 MHz		BPSK			46.006
			QPSK			45.972
			16-QAM			45.937
			64-QAM			45.827
			256-QAM			45.753

	60 MHz		BPSK			57.971
			QPSK			57.919
			16-QAM			58.120
			64-QAM			57.849
			256-QAM			57.918
	70 MHz		BPSK			64.438
			QPSK			64.598
			16-QAM			64.496
			64-QAM			64.342
			256-QAM			64.560
	80 MHz		BPSK			77.273
			QPSK			77.358
			16-QAM			77.324
			64-QAM			77.193
			256-QAM			77.292
	90 MHz		BPSK			86.859
			QPSK			87.080
			16-QAM			86.915
			64-QAM			87.175
			256-QAM			86.797
	100 MHz		BPSK			96.603
			QPSK			96.727
			16-QAM			96.542
			64-QAM			96.631
			256-QAM			96.524

Note:

1. Plots of the EUT's Occupied Bandwidth are shown Page 218 ~ 277.

8.5 CONDUCTED SPURIOUS EMISSIONS

Band	Band Width (MHz)	Frequency (MHz)	Frequency of Maximum Harmonic (GHz)	Factor (dB)	Measurement Maximum Data (dBm)	Result (dBm)	Limit (dBm)
Sub6 n77	10	3455.010	4.92527	28.150	-61.78	-33.628	-13.00
		3500.010	8.89333	28.730	-61.75	-33.021	
		3544.980	4.85548	28.150	-60.54	-32.394	
	15	3457.500	4.70593	28.150	-62.17	-34.019	
		3500.010	4.72587	28.150	-61.74	-33.586	
		3542.490	4.96515	28.150	-62.00	-33.850	
	20	3460.020	8.01597	28.730	-61.85	-33.120	
		3500.010	4.99506	28.150	-61.29	-33.138	
		3540.000	4.93524	28.150	-61.99	-33.838	
	25	3462.510	5.19446	28.730	-62.35	-33.617	
		3500.010	9.97009	28.730	-61.90	-33.170	
		3537.480	4.86545	28.150	-61.49	-33.342	
	30	3465.000	5.94221	28.730	-62.45	-33.722	
		3500.010	4.92527	28.150	-61.70	-33.551	
		3534.990	5.21440	28.730	-62.18	-33.452	
	40	3470.010	7.19843	28.730	-62.53	-33.800	
		3500.010	7.94618	28.730	-62.10	-33.371	
		3529.980	6.03194	28.730	-62.23	-33.496	
	50	3475.020	5.23434	28.730	-62.12	-33.387	
		3500.010	5.22437	28.730	-61.95	-33.216	
		3525.000	8.21537	28.730	-61.37	-32.642	
	60	3480.000	5.22437	28.730	-62.25	-33.518	
		3500.010	4.96515	28.150	-61.00	-32.852	
		3519.990	7.63711	28.730	-62.40	-33.666	
	70	3485.010	9.60120	28.730	-62.26	-33.531	
		3500.010	4.95518	28.150	-62.09	-33.936	
		3514.980	4.94521	28.150	-61.09	-32.940	
	80	3490.020	5.96215	28.730	-61.69	-32.957	
		3500.010	4.49656	28.150	-61.25	-33.101	
		3510.000	4.90533	28.150	-61.19	-33.040	
	90	3495.000	8.41477	28.730	-62.14	-33.408	
		3500.010	4.90533	28.150	-60.92	-32.767	
		3504.990	4.96515	28.150	-62.26	-34.109	
	100	3500.010	7.19843	28.730	-61.88	-33.152	

Note:

1. Plots of the EUT's Conducted Spurious Emissions are shown Page 278 ~ 345.
2. Factor(dB) = Cable Loss + Ext. Attenuator + Power Splitter
3. Result(dBm) = Reading + Factor

Factor(dB)

Frequency Range (GHz)	Factor [dB]
0.03 – 1	27.270
1 – 5	28.150
5 – 10	28.730
10 – 15	29.330
15 – 20	30.520
Above 20	31.890

8.6 BAND EDGE

1. Plots of the EUT's Band Edge are shown Page 346 ~ 489.
2. Duty Cycle factor already applied on the factor.
 - Factor(dB) = Duty Cycle factor + Cable Loss + Ext. Attenuator + Power Splitter
 - Result(dBm) = Reading + Factor
 - Duty Cycle Factor(dB) = 6.990

8.7 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE

- ▣ BandWidth: 10 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3455.010	100 %	+20(Ref)	3455 009 994	0.0	0.000 000	0.000
	100 %	-30	3455 009 988	-5.9	0.000 000	-0.002
	100 %	-20	3455 009 986	-7.8	0.000 000	-0.002
	100 %	-10	3455 009 990	-4.7	0.000 000	-0.001
	100 %	0	3455 009 988	-6.8	0.000 000	-0.002
	100 %	+10	3455 009 989	-5.3	0.000 000	-0.002
	100 %	+30	3455 009 989	-5.7	0.000 000	-0.002
	100 %	+40	3455 009 987	-7.2	0.000 000	-0.002
	100 %	+50	3455 009 986	-8.2	0.000 000	-0.002
	Lowest voltage	+20	3455 009 990	-4.7	0.000 000	-0.001
3544.980	100 %	+20(Ref)	3544 979 995	0.0	0.000 000	0.000
	100 %	-30	3544 979 989	-5.8	0.000 000	-0.002
	100 %	-20	3544 979 991	-4.4	0.000 000	-0.001
	100 %	-10	3544 979 989	-6.2	0.000 000	-0.002
	100 %	0	3544 979 989	-6.4	0.000 000	-0.002
	100 %	+10	3544 979 988	-6.8	0.000 000	-0.002
	100 %	+30	3544 979 990	-5.1	0.000 000	-0.001
	100 %	+40	3544 979 989	-5.8	0.000 000	-0.002
	100 %	+50	3544 979 988	-6.5	0.000 000	-0.002
	Lowest voltage	+20	3544 979 988	-7.1	0.000 000	-0.002

- ▣ BandWidth: 15 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3457.500	100 %	+20(Ref)	3457 499 994	0.0	0.000 000	0.000
	100 %	-30	3457 499 989	-4.6	0.000 000	-0.001
	100 %	-20	3457 499 991	-2.8	0.000 000	-0.001
	100 %	-10	3457 499 988	-6.1	0.000 000	-0.002
	100 %	0	3457 499 987	-7.0	0.000 000	-0.002
	100 %	+10	3457 499 991	-3.4	0.000 000	-0.001
	100 %	+30	3457 499 988	-5.9	0.000 000	-0.002
	100 %	+40	3457 499 990	-4.2	0.000 000	-0.001
	100 %	+50	3457 499 989	-5.1	0.000 000	-0.001
	Lowest voltage	+20	3457 499 990	-3.9	0.000 000	-0.001
3542.490	100 %	+20(Ref)	3542 489 997	0.0	0.000 000	0.000
	100 %	-30	3542 489 992	-4.6	0.000 000	-0.001
	100 %	-20	3542 489 992	-4.9	0.000 000	-0.001
	100 %	-10	3542 489 990	-7.1	0.000 000	-0.002
	100 %	0	3542 489 991	-6.1	0.000 000	-0.002
	100 %	+10	3542 489 990	-7.1	0.000 000	-0.002
	100 %	+30	3542 489 991	-5.4	0.000 000	-0.002
	100 %	+40	3542 489 990	-6.7	0.000 000	-0.002
	100 %	+50	3542 489 993	-3.6	0.000 000	-0.001
	Lowest voltage	+20	3542 489 992	-4.6	0.000 000	-0.001

- ▣ BandWidth: 20 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3460.020	100 %	+20(Ref)	3460 019 995	0.0	0.000 000	0.000
	100 %	-30	3460 019 994	-1.6	0.000 000	0.000
	100 %	-20	3460 019 993	-2.0	0.000 000	-0.001
	100 %	-10	3460 019 992	-2.8	0.000 000	-0.001
	100 %	0	3460 019 991	-4.6	0.000 000	-0.001
	100 %	+10	3460 019 990	-5.5	0.000 000	-0.002
	100 %	+30	3460 019 993	-2.4	0.000 000	-0.001
	100 %	+40	3460 019 992	-3.4	0.000 000	-0.001
	100 %	+50	3460 019 992	-3.1	0.000 000	-0.001
	Lowest voltage	+20	3460 019 992	-3.4	0.000 000	-0.001
3540.000	100 %	+20(Ref)	3539 999 996	0.0	0.000 000	0.000
	100 %	-30	3539 999 993	-3.1	0.000 000	-0.001
	100 %	-20	3539 999 991	-4.9	0.000 000	-0.001
	100 %	-10	3539 999 989	-6.8	0.000 000	-0.002
	100 %	0	3539 999 990	-6.5	0.000 000	-0.002
	100 %	+10	3539 999 990	-6.0	0.000 000	-0.002
	100 %	+30	3539 999 991	-4.8	0.000 000	-0.001
	100 %	+40	3539 999 989	-6.7	0.000 000	-0.002
	100 %	+50	3539 999 990	-6.0	0.000 000	-0.002
	Lowest voltage	+20	3539 999 988	-7.7	0.000 000	-0.002

- ▣ BandWidth: 25 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3462.510	100 %	+20(Ref)	3462 509 994	0.0	0.000 000	0.000
	100 %	-30	3462 509 986	-8.7	0.000 000	-0.003
	100 %	-20	3462 509 988	-6.1	0.000 000	-0.002
	100 %	-10	3462 509 988	-6.0	0.000 000	-0.002
	100 %	0	3462 509 988	-6.3	0.000 000	-0.002
	100 %	+10	3462 509 988	-6.2	0.000 000	-0.002
	100 %	+30	3462 509 988	-6.3	0.000 000	-0.002
	100 %	+40	3462 509 989	-5.8	0.000 000	-0.002
	100 %	+50	3462 509 990	-4.3	0.000 000	-0.001
	Lowest voltage	+20	3462 509 989	-4.9	0.000 000	-0.001
3537.480	100 %	+20(Ref)	3537 479 995	0.0	0.000 000	0.000
	100 %	-30	3537 479 991	-3.4	0.000 000	-0.001
	100 %	-20	3537 479 989	-5.8	0.000 000	-0.002
	100 %	-10	3537 479 989	-5.8	0.000 000	-0.002
	100 %	0	3537 479 991	-3.8	0.000 000	-0.001
	100 %	+10	3537 479 990	-4.9	0.000 000	-0.001
	100 %	+30	3537 479 988	-6.6	0.000 000	-0.002
	100 %	+40	3537 479 989	-5.6	0.000 000	-0.002
	100 %	+50	3537 479 989	-5.9	0.000 000	-0.002
	Lowest voltage	+20	3537 479 992	-3.2	0.000 000	-0.001

- BandWidth: 30 MHz
- Voltage(100 %): 4.200 VDC
- Lowest voltage: 3.700 VDC
- LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3465.000	100 %	+20(Ref)	3464 999 994	0.0	0.000 000	0.000
	100 %	-30	3464 999 989	-5.1	0.000 000	-0.001
	100 %	-20	3464 999 989	-5.3	0.000 000	-0.002
	100 %	-10	3464 999 991	-3.5	0.000 000	-0.001
	100 %	0	3464 999 987	-7.2	0.000 000	-0.002
	100 %	+10	3464 999 987	-7.1	0.000 000	-0.002
	100 %	+30	3464 999 990	-4.6	0.000 000	-0.001
	100 %	+40	3464 999 990	-4.2	0.000 000	-0.001
	100 %	+50	3464 999 989	-5.3	0.000 000	-0.002
	Lowest voltage	+20	3464 999 989	-5.0	0.000 000	-0.001
3534.990	100 %	+20(Ref)	3534 989 995	0.0	0.000 000	0.000
	100 %	-30	3534 989 991	-4.1	0.000 000	-0.001
	100 %	-20	3534 989 992	-2.9	0.000 000	-0.001
	100 %	-10	3534 989 990	-5.6	0.000 000	-0.002
	100 %	0	3534 989 991	-4.6	0.000 000	-0.001
	100 %	+10	3534 989 992	-3.6	0.000 000	-0.001
	100 %	+30	3534 989 988	-6.9	0.000 000	-0.002
	100 %	+40	3534 989 990	-5.1	0.000 000	-0.001
	100 %	+50	3534 989 990	-5.4	0.000 000	-0.002
	Lowest voltage	+20	3534 989 991	-3.8	0.000 000	-0.001

- ▣ BandWidth: 40 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3470.010	100 %	+20(Ref)	3470 009 995	0.0	0.000 000	0.000
	100 %	-30	3470 009 992	-3.4	0.000 000	-0.001
	100 %	-20	3470 009 993	-1.9	0.000 000	-0.001
	100 %	-10	3470 009 991	-4.0	0.000 000	-0.001
	100 %	0	3470 009 990	-4.9	0.000 000	-0.001
	100 %	+10	3470 009 991	-4.2	0.000 000	-0.001
	100 %	+30	3470 009 991	-4.4	0.000 000	-0.001
	100 %	+40	3470 009 992	-3.6	0.000 000	-0.001
	100 %	+50	3470 009 990	-4.8	0.000 000	-0.001
	Lowest voltage	+20	3470 009 991	-4.6	0.000 000	-0.001
3529.980	100 %	+20(Ref)	3529 979 993	0.0	0.000 000	0.000
	100 %	-30	3529 979 988	-5.4	0.000 000	-0.002
	100 %	-20	3529 979 987	-6.7	0.000 000	-0.002
	100 %	-10	3529 979 988	-5.1	0.000 000	-0.001
	100 %	0	3529 979 987	-6.5	0.000 000	-0.002
	100 %	+10	3529 979 989	-4.3	0.000 000	-0.001
	100 %	+30	3529 979 988	-5.0	0.000 000	-0.001
	100 %	+40	3529 979 988	-5.3	0.000 000	-0.002
	100 %	+50	3529 979 989	-4.2	0.000 000	-0.001
	Lowest voltage	+20	3529 979 986	-7.1	0.000 000	-0.002

- ▣ BandWidth: 50 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3475.020	100 %	+20(Ref)	3475 019 994	0.0	0.000 000	0.000
	100 %	-30	3475 019 987	-7.1	0.000 000	-0.002
	100 %	-20	3475 019 987	-6.7	0.000 000	-0.002
	100 %	-10	3475 019 988	-5.7	0.000 000	-0.002
	100 %	0	3475 019 989	-5.5	0.000 000	-0.002
	100 %	+10	3475 019 988	-6.5	0.000 000	-0.002
	100 %	+30	3475 019 989	-5.1	0.000 000	-0.001
	100 %	+40	3475 019 988	-5.9	0.000 000	-0.002
	100 %	+50	3475 019 987	-6.9	0.000 000	-0.002
	Lowest voltage	+20	3475 019 989	-5.1	0.000 000	-0.001
3525.000	100 %	+20(Ref)	3524 999 995	0.0	0.000 000	0.000
	100 %	-30	3524 999 990	-5.3	0.000 000	-0.002
	100 %	-20	3524 999 991	-4.8	0.000 000	-0.001
	100 %	-10	3524 999 988	-7.0	0.000 000	-0.002
	100 %	0	3524 999 991	-4.6	0.000 000	-0.001
	100 %	+10	3524 999 990	-5.9	0.000 000	-0.002
	100 %	+30	3524 999 989	-6.9	0.000 000	-0.002
	100 %	+40	3524 999 991	-4.6	0.000 000	-0.001
	100 %	+50	3524 999 990	-5.4	0.000 000	-0.002
	Lowest voltage	+20	3524 999 990	-5.6	0.000 000	-0.002

- ▣ BandWidth: 60 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3480.000	100 %	+20(Ref)	3479 999 995	0.0	0.000 000	0.000
	100 %	-30	3479 999 990	-4.9	0.000 000	-0.001
	100 %	-20	3479 999 988	-6.4	0.000 000	-0.002
	100 %	-10	3479 999 991	-3.4	0.000 000	-0.001
	100 %	0	3479 999 989	-5.4	0.000 000	-0.002
	100 %	+10	3479 999 989	-5.5	0.000 000	-0.002
	100 %	+30	3479 999 987	-7.4	0.000 000	-0.002
	100 %	+40	3479 999 991	-3.8	0.000 000	-0.001
	100 %	+50	3479 999 990	-5.1	0.000 000	-0.001
	Lowest voltage	+20	3479 999 989	-5.7	0.000 000	-0.002
3519.990	100 %	+20(Ref)	3519 989 993	0.0	0.000 000	0.000
	100 %	-30	3519 989 987	-6.2	0.000 000	-0.002
	100 %	-20	3519 989 987	-6.0	0.000 000	-0.002
	100 %	-10	3519 989 987	-6.0	0.000 000	-0.002
	100 %	0	3519 989 988	-5.5	0.000 000	-0.002
	100 %	+10	3519 989 986	-7.3	0.000 000	-0.002
	100 %	+30	3519 989 987	-6.3	0.000 000	-0.002
	100 %	+40	3519 989 987	-6.8	0.000 000	-0.002
	100 %	+50	3519 989 986	-7.3	0.000 000	-0.002
	Lowest voltage	+20	3519 989 989	-4.3	0.000 000	-0.001

- ▣ BandWidth: 70 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3485.010	100 %	+20(Ref)	3485 009 993	0.0	0.000 000	0.000
	100 %	-30	3485 009 988	-5.5	0.000 000	-0.002
	100 %	-20	3485 009 986	-7.3	0.000 000	-0.002
	100 %	-10	3485 009 987	-6.3	0.000 000	-0.002
	100 %	0	3485 009 987	-6.3	0.000 000	-0.002
	100 %	+10	3485 009 986	-7.3	0.000 000	-0.002
	100 %	+30	3485 009 987	-5.8	0.000 000	-0.002
	100 %	+40	3485 009 989	-3.9	0.000 000	-0.001
	100 %	+50	3485 009 987	-5.8	0.000 000	-0.002
	Lowest voltage	+20	3485 009 988	-5.7	0.000 000	-0.002
3514.980	100 %	+20(Ref)	3514 979 996	0.0	0.000 000	0.000
	100 %	-30	3514 979 992	-3.7	0.000 000	-0.001
	100 %	-20	3514 979 987	-8.3	0.000 000	-0.002
	100 %	-10	3514 979 988	-7.2	0.000 000	-0.002
	100 %	0	3514 979 991	-4.3	0.000 000	-0.001
	100 %	+10	3514 979 988	-7.5	0.000 000	-0.002
	100 %	+30	3514 979 988	-7.0	0.000 000	-0.002
	100 %	+40	3514 979 990	-5.4	0.000 000	-0.002
	100 %	+50	3514 979 991	-4.9	0.000 000	-0.001
	Lowest voltage	+20	3514 979 991	-4.6	0.000 000	-0.001

- ▣ BandWidth: 80 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3490.020	100 %	+20(Ref)	3490 019 995	0.0	0.000 000	0.000
	100 %	-30	3490 019 989	-6.0	0.000 000	-0.002
	100 %	-20	3490 019 990	-4.3	0.000 000	-0.001
	100 %	-10	3490 019 988	-6.9	0.000 000	-0.002
	100 %	0	3490 019 988	-6.2	0.000 000	-0.002
	100 %	+10	3490 019 990	-4.7	0.000 000	-0.001
	100 %	+30	3490 019 989	-5.2	0.000 000	-0.001
	100 %	+40	3490 019 989	-5.9	0.000 000	-0.002
	100 %	+50	3490 019 987	-7.7	0.000 000	-0.002
	Lowest voltage	+20	3490 019 989	-5.8	0.000 000	-0.002
3510.000	100 %	+20(Ref)	3509 999 997	0.0	0.000 000	0.000
	100 %	-30	3509 999 991	-5.9	0.000 000	-0.002
	100 %	-20	3509 999 991	-5.5	0.000 000	-0.002
	100 %	-10	3509 999 992	-4.9	0.000 000	-0.001
	100 %	0	3509 999 993	-3.9	0.000 000	-0.001
	100 %	+10	3509 999 989	-7.7	0.000 000	-0.002
	100 %	+30	3509 999 989	-7.3	0.000 000	-0.002
	100 %	+40	3509 999 991	-5.8	0.000 000	-0.002
	100 %	+50	3509 999 990	-6.4	0.000 000	-0.002
	Lowest voltage	+20	3509 999 991	-5.4	0.000 000	-0.002

- ▣ BandWidth: 90 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3495.000	100 %	+20(Ref)	3494 999 995	0.0	0.000 000	0.000
	100 %	-30	3494 999 990	-4.5	0.000 000	-0.001
	100 %	-20	3494 999 991	-3.6	0.000 000	-0.001
	100 %	-10	3494 999 990	-4.6	0.000 000	-0.001
	100 %	0	3494 999 991	-4.1	0.000 000	-0.001
	100 %	+10	3494 999 991	-3.8	0.000 000	-0.001
	100 %	+30	3494 999 988	-6.7	0.000 000	-0.002
	100 %	+40	3494 999 988	-6.8	0.000 000	-0.002
	100 %	+50	3494 999 987	-7.2	0.000 000	-0.002
	Lowest voltage	+20	3494 999 989	-5.8	0.000 000	-0.002
3504.990	100 %	+20(Ref)	3504 989 997	0.0	0.000 000	0.000
	100 %	-30	3504 989 993	-4.0	0.000 000	-0.001
	100 %	-20	3504 989 993	-4.5	0.000 000	-0.001
	100 %	-10	3504 989 994	-3.1	0.000 000	-0.001
	100 %	0	3504 989 991	-5.9	0.000 000	-0.002
	100 %	+10	3504 989 994	-3.2	0.000 000	-0.001
	100 %	+30	3504 989 992	-5.3	0.000 000	-0.002
	100 %	+40	3504 989 993	-4.8	0.000 000	-0.001
	100 %	+50	3504 989 993	-3.9	0.000 000	-0.001
	Lowest voltage	+20	3504 989 995	-2.8	0.000 000	-0.001

- ▣ BandWidth: 100 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3500.010	100 %	+20(Ref)	3500 009 993	0.0	0.000 000	0.000
	100 %	-30	3500 009 985	-7.7	0.000 000	-0.002
	100 %	-20	3500 009 988	-5.0	0.000 000	-0.001
	100 %	-10	3500 009 986	-6.7	0.000 000	-0.002
	100 %	0	3500 009 987	-6.2	0.000 000	-0.002
	100 %	+10	3500 009 987	-6.2	0.000 000	-0.002
	100 %	+30	3500 009 986	-6.5	0.000 000	-0.002
	100 %	+40	3500 009 987	-6.2	0.000 000	-0.002
	100 %	+50	3500 009 985	-7.8	0.000 000	-0.002
	Lowest voltage	+20	3500 009 984	-8.5	0.000 000	-0.002

9. TEST DATA (MIMO1, 3700 MHz - 3980 MHz)

9.1 EQUIVALENT ISOTROPIC RADIATED POWER

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3705.00	Sub6 n77(78)/ 10 MHz [30 kHz]	PI/2 BPSK	-30.65	10.71	11.82	3.08	V	< 1.00	0.088	19.45	1	12
		QPSK	-30.68	10.68	11.82	3.08	V		0.087	19.42		
		16-QAM	-31.85	9.51	11.82	3.08	V		0.067	18.25		
		64-QAM	-33.31	8.05	11.82	3.08	V		0.048	16.79		
		256-QAM	-35.13	6.23	11.82	3.08	V		0.031	14.97		
3840.00		PI/2 BPSK	-30.31	12.69	11.25	3.20	V		0.119	20.74	1	1
		QPSK	-30.37	12.63	11.25	3.20	V		0.117	20.68		
		16-QAM	-31.36	11.64	11.25	3.20	V		0.093	19.69		
		64-QAM	-32.49	10.51	11.25	3.20	V		0.072	18.56		
		256-QAM	-34.66	8.34	11.25	3.20	V		0.044	16.39		
3975.00		PI/2 BPSK	-29.33	13.90	11.30	3.25	V		0.157	21.95	1	22
		QPSK	-29.35	13.88	11.30	3.25	V		0.156	21.93		
		16-QAM	-29.89	13.34	11.30	3.25	V		0.138	21.39		
		64-QAM	-31.41	11.82	11.30	3.25	V		0.097	19.87		
		256-QAM	-33.09	10.14	11.30	3.25	V		0.066	18.19		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3707.51	Sub6 n77(78)/ 15 MHz [30 kHz]	PI/2 BPSK	-30.72	10.67	11.80	3.08	V	< 1.00	0.087	19.39	1	1
		QPSK	-30.87	10.52	11.80	3.08	V		0.084	19.24		
		16-QAM	-31.55	9.84	11.80	3.08	V		0.072	18.56		
		64-QAM	-33.01	8.38	11.80	3.08	V		0.051	17.10		
		256-QAM	-35.11	6.28	11.80	3.08	V		0.032	15.00		
3840.00		PI/2 BPSK	-29.71	13.29	11.25	3.20	V		0.136	21.34	1	36
		QPSK	-29.72	13.28	11.25	3.20	V		0.136	21.33		
		16-QAM	-30.38	12.62	11.25	3.20	V		0.117	20.67		
		64-QAM	-32.24	10.76	11.25	3.20	V		0.076	18.81		
		256-QAM	-34.01	8.99	11.25	3.20	V		0.051	17.04		
3972.48		PI/2 BPSK	-29.18	14.07	11.28	3.25	V		0.162	22.10	1	36
		QPSK	-29.21	14.04	11.28	3.25	V		0.161	22.07		
		16-QAM	-29.84	13.41	11.28	3.25	V		0.139	21.44		
		64-QAM	-31.14	12.11	11.28	3.25	V		0.103	20.14		
		256-QAM	-33.19	10.06	11.28	3.25	V		0.064	18.09		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3710.01	Sub6 n77(78)/ 20 MHz [30 kHz]	PI/2 BPSK	-30.06	11.33	11.80	3.08	V	< 1.00	0.101	20.05	1	1
		QPSK	-30.43	10.96	11.80	3.08	V		0.093	19.68		
		16-QAM	-31.50	9.89	11.80	3.08	V		0.073	18.61		
		64-QAM	-32.48	8.91	11.80	3.08	V		0.058	17.63		
		256-QAM	-35.15	6.24	11.80	3.08	V		0.031	14.96		
3840.00		PI/2 BPSK	-29.38	13.62	11.25	3.20	V		0.147	21.67	1	1
		QPSK	-29.44	13.56	11.25	3.20	V		0.145	21.61		
		16-QAM	-29.89	13.11	11.25	3.20	V		0.131	21.16		
		64-QAM	-31.69	11.31	11.25	3.20	V		0.086	19.36		
		256-QAM	-34.12	8.88	11.25	3.20	V		0.049	16.93		
3969.99		PI/2 BPSK	-28.69	14.56	11.28	3.25	V		0.182	22.59	1	49
		QPSK	-29.17	14.08	11.28	3.25	V		0.163	22.11		
		16-QAM	-29.86	13.39	11.28	3.25	V		0.139	21.42		
		64-QAM	-31.66	11.59	11.28	3.25	V		0.092	19.62		
		256-QAM	-33.26	9.99	11.28	3.25	V		0.063	18.02		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3712.50	Sub6 n77(78)/ 25 MHz [30 kHz]	PI/2 BPSK	-29.83	11.57	11.78	3.11	V	< 1.00	0.106	20.24	1	1
		QPSK	-30.38	11.02	11.78	3.11	V		0.093	19.69		
		16-QAM	-31.23	10.17	11.78	3.11	V		0.077	18.84		
		64-QAM	-32.76	8.64	11.78	3.11	V		0.054	17.31		
		256-QAM	-34.64	6.76	11.78	3.11	V		0.035	15.43		
3840.00		PI/2 BPSK	-29.16	13.84	11.25	3.20	V		0.155	21.89	1	1
		QPSK	-29.44	13.56	11.25	3.20	V		0.145	21.61		
		16-QAM	-30.55	12.45	11.25	3.20	V		0.112	20.50		
		64-QAM	-31.55	11.45	11.25	3.20	V		0.089	19.50		
		256-QAM	-33.33	9.67	11.25	3.20	V		0.059	17.72		
3967.50		PI/2 BPSK	-28.71	14.54	11.28	3.25	V		0.181	22.57	1	63
		QPSK	-29.00	14.25	11.28	3.25	V		0.169	22.28		
		16-QAM	-29.33	13.92	11.28	3.25	V		0.157	21.95		
		64-QAM	-31.37	11.88	11.28	3.25	V		0.098	19.91		
		256-QAM	-33.40	9.85	11.28	3.25	V		0.061	17.88		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3715.02	Sub6 n77(78)/ 30 MHz [30 kHz]	PI/2 BPSK	-30.34	11.06	11.78	3.11	V	< 1.00	0.094	19.73	1	1
		QPSK	-30.53	10.87	11.78	3.11	V		0.090	19.54		
		16-QAM	-31.11	10.29	11.78	3.11	V		0.079	18.96		
		64-QAM	-32.69	8.71	11.78	3.11	V		0.055	17.38		
		256-QAM	-34.81	6.59	11.78	3.11	V		0.034	15.26		
3840.00		PI/2 BPSK	-29.45	13.55	11.25	3.20	V		0.145	21.60	1	1
		QPSK	-29.72	13.28	11.25	3.20	V		0.136	21.33		
		16-QAM	-30.33	12.67	11.25	3.20	V		0.118	20.72		
		64-QAM	-31.57	11.43	11.25	3.20	V		0.089	19.48		
		256-QAM	-33.98	9.02	11.25	3.20	V		0.051	17.07		
3964.98		PI/2 BPSK	-29.14	14.12	11.27	3.24	V		0.164	22.15	1	76
		QPSK	-29.20	14.06	11.27	3.24	V		0.162	22.09		
		16-QAM	-29.94	13.32	11.27	3.24	V		0.136	21.35		
		64-QAM	-31.14	12.12	11.27	3.24	V		0.104	20.15		
		256-QAM	-33.33	9.93	11.27	3.24	V		0.063	17.96		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3720.00	Sub6 n77(78)/ 40 MHz [30 kHz]	PI/2 BPSK	-29.89	11.51	11.77	3.13	V	< 1.00	0.104	20.15	1	1
		QPSK	-30.11	11.29	11.77	3.13	V		0.098	19.93		
		16-QAM	-30.89	10.51	11.77	3.13	V		0.082	19.15		
		64-QAM	-32.66	8.74	11.77	3.13	V		0.055	17.38		
		256-QAM	-34.65	6.75	11.77	3.13	V		0.035	15.39		
3840.00		PI/2 BPSK	-29.07	13.93	11.25	3.20	V		0.158	21.98	1	1
		QPSK	-29.32	13.68	11.25	3.20	V		0.149	21.73		
		16-QAM	-29.92	13.08	11.25	3.20	V		0.130	21.13		
		64-QAM	-31.54	11.46	11.25	3.20	V		0.089	19.51		
		256-QAM	-33.59	9.41	11.25	3.20	V		0.056	17.46		
3960.00		PI/2 BPSK	-28.70	14.60	11.25	3.24	V		0.182	22.61	1	104
		QPSK	-29.27	14.03	11.25	3.24	V		0.160	22.04		
		16-QAM	-31.10	12.20	11.25	3.24	V		0.105	20.21		
		64-QAM	-31.17	12.13	11.25	3.24	V		0.103	20.14		
		256-QAM	-33.35	9.95	11.25	3.24	V		0.063	17.96		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3725.10	Sub6 n77(78)/ 50 MHz [30 kHz]	PI/2 BPSK	-29.56	11.89	11.75	3.15	V	< 1.00	0.112	20.49	1	131
		QPSK	-29.73	11.72	11.75	3.15	V		0.108	20.32		
		16-QAM	-30.52	10.93	11.75	3.15	V		0.090	19.53		
		64-QAM	-31.98	9.47	11.75	3.15	V		0.064	18.07		
		256-QAM	-33.83	7.62	11.75	3.15	V		0.042	16.22		
3840.00		PI/2 BPSK	-29.71	13.29	11.25	3.20	V		0.136	21.34	1	66
		QPSK	-29.73	13.27	11.25	3.20	V		0.136	21.32		
		16-QAM	-30.31	12.69	11.25	3.20	V		0.119	20.74		
		64-QAM	-32.08	10.92	11.25	3.20	V		0.079	18.97		
		256-QAM	-33.97	9.03	11.25	3.20	V		0.051	17.08		
3954.99		PI/2 BPSK	-28.82	14.48	11.24	3.23	V		0.177	22.49	1	131
		QPSK	-28.95	14.35	11.24	3.23	V		0.172	22.36		
		16-QAM	-30.31	12.99	11.24	3.23	V		0.126	21.00		
		64-QAM	-31.44	11.86	11.24	3.23	V		0.097	19.87		
		256-QAM	-33.63	9.67	11.24	3.23	V		0.059	17.68		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3730.02	Sub6 n77(78)/ 60 MHz [30 kHz]	PI/2 BPSK	-28.67	12.83	11.73	3.17	V	< 1.00	0.138	21.39	1	160
		QPSK	-28.72	12.78	11.73	3.17	V		0.136	21.34		
		16-QAM	-29.61	11.89	11.73	3.17	V		0.111	20.45		
		64-QAM	-30.94	10.56	11.73	3.17	V		0.082	19.12		
		256-QAM	-33.44	8.06	11.73	3.17	V		0.046	16.62		
3840.00		PI/2 BPSK	-29.27	13.73	11.25	3.20	V		0.151	21.78	1	1
		QPSK	-29.50	13.50	11.25	3.20	V		0.143	21.55		
		16-QAM	-30.09	12.91	11.25	3.20	V		0.125	20.96		
		64-QAM	-31.21	11.79	11.25	3.20	V		0.096	19.84		
		256-QAM	-33.27	9.73	11.25	3.20	V		0.060	17.78		
3949.98		PI/2 BPSK	-28.90	14.40	11.23	3.22	V		0.174	22.41	1	160
		QPSK	-29.07	14.23	11.23	3.22	V		0.167	22.24		
		16-QAM	-29.66	13.64	11.23	3.22	V		0.146	21.65		
		64-QAM	-31.15	12.15	11.23	3.22	V		0.104	20.16		
		256-QAM	-33.28	10.02	11.23	3.22	V		0.064	18.03		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3735.00	Sub6 n77(78)/ 70 MHz [30 kHz]	PI/2 BPSK	-28.16	13.39	11.72	3.18	V	< 1.00	0.156	21.93	1	187
		QPSK	-28.59	12.96	11.72	3.18	V		0.141	21.50		
		16-QAM	-29.61	11.94	11.72	3.18	V		0.112	20.48		
		64-QAM	-30.65	10.90	11.72	3.18	V		0.088	19.44		
		256-QAM	-33.11	8.44	11.72	3.18	V		0.050	16.98		
3840.00		PI/2 BPSK	-28.86	14.14	11.25	3.20	V		0.166	22.19	1	1
		QPSK	-28.89	14.11	11.25	3.20	V		0.164	22.16		
		16-QAM	-30.32	12.68	11.25	3.20	V		0.118	20.73		
		64-QAM	-30.96	12.04	11.25	3.20	V		0.102	20.09		
		256-QAM	-33.42	9.58	11.25	3.20	V		0.058	17.63		
3945.00		PI/2 BPSK	-28.92	14.42	11.21	3.23	V		0.174	22.40	1	187
		QPSK	-28.96	14.38	11.21	3.23	V		0.172	22.36		
		16-QAM	-30.00	13.34	11.21	3.23	V		0.136	21.32		
		64-QAM	-31.67	11.67	11.21	3.23	V		0.092	19.65		
		256-QAM	-33.35	9.99	11.21	3.23	V		0.063	17.97		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3740.01	Sub6 n77(78)/ 80 MHz [30 kHz]	PI/2 BPSK	-28.38	13.22	11.70	3.19	V	< 1.00	0.149	21.73	1	215
		QPSK	-28.49	13.11	11.70	3.19	V		0.145	21.62		
		16-QAM	-29.30	12.30	11.70	3.19	V		0.121	20.81		
		64-QAM	-30.38	11.22	11.70	3.19	V		0.094	19.73		
		256-QAM	-32.50	9.10	11.70	3.19	V		0.058	17.61		
3840.00		PI/2 BPSK	-28.78	14.22	11.25	3.20	V		0.169	22.27	1	1
		QPSK	-28.78	14.22	11.25	3.20	V		0.169	22.27		
		16-QAM	-29.70	13.30	11.25	3.20	V		0.136	21.35		
		64-QAM	-30.80	12.20	11.25	3.20	V		0.106	20.25		
		256-QAM	-33.13	9.87	11.25	3.20	V		0.062	17.92		
3939.99		PI/2 BPSK	-29.22	14.14	11.20	3.23	V		0.163	22.11	1	215
		QPSK	-29.40	13.96	11.20	3.23	V		0.156	21.93		
		16-QAM	-30.18	13.18	11.20	3.23	V		0.130	21.15		
		64-QAM	-31.44	11.92	11.20	3.23	V		0.097	19.89		
		256-QAM	-33.51	9.85	11.20	3.23	V		0.061	17.82		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3745.02		PI/2 BPSK	-28.39	13.24	11.69	3.18	V	< 1.00	0.150	21.75	1	243
		QPSK	-28.84	12.79	11.69	3.18	V		0.135	21.30		
		16-QAM	-29.44	12.19	11.69	3.18	V		0.117	20.70		
		64-QAM	-30.76	10.87	11.69	3.18	V		0.087	19.38		
		256-QAM	-32.87	8.76	11.69	3.18	V		0.053	17.27		
3840.00	Sub6 n77(78)/ 90 MHz [30 kHz]	PI/2 BPSK	-28.58	14.42	11.25	3.20	V		0.177	22.47	1	1
		QPSK	-28.86	14.14	11.25	3.20	V		0.166	22.19		
		16-QAM	-29.42	13.58	11.25	3.20	V		0.146	21.63		
		64-QAM	-31.08	11.92	11.25	3.20	V		0.099	19.97		
		256-QAM	-33.15	9.85	11.25	3.20	V		0.062	17.90		
3934.98		PI/2 BPSK	-29.09	14.29	11.18	3.24	V		0.167	22.23	1	243
		QPSK	-29.35	14.03	11.18	3.24	V		0.157	21.97		
		16-QAM	-30.00	13.38	11.18	3.24	V		0.136	21.32		
		64-QAM	-31.30	12.08	11.18	3.24	V		0.100	20.02		
		256-QAM	-33.39	9.99	11.18	3.24	V		0.062	17.93		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3750.00	Sub6 n77(78)/ 100 MHz [30 kHz]	PI/2 BPSK	-28.69	12.98	11.67	3.17	V	< 1.00	0.141	21.48	1	271
		QPSK	-29.08	12.59	11.67	3.17	V		0.129	21.09		
		16-QAM	-33.17	8.50	11.67	3.17	V		0.050	17.00		
		64-QAM	-31.39	10.28	11.67	3.17	V		0.076	18.78		
		256-QAM	-33.43	8.24	11.67	3.17	V		0.047	16.74		
3840.00		PI/2 BPSK	-29.23	13.77	11.25	3.20	V		0.152	21.82	1	1
		QPSK	-29.27	13.73	11.25	3.20	V		0.151	21.78		
		16-QAM	-30.17	12.83	11.25	3.20	V		0.122	20.88		
		64-QAM	-31.58	11.42	11.25	3.20	V		0.089	19.47		
		256-QAM	-33.58	9.42	11.25	3.20	V		0.056	17.47		
3930.00		PI/2 BPSK	-28.90	14.51	11.17	3.26	V		0.175	22.42	1	271
		QPSK	-29.03	14.38	11.17	3.26	V		0.169	22.29		
		16-QAM	-30.17	13.24	11.17	3.26	V		0.130	21.15		
		64-QAM	-31.56	11.85	11.17	3.26	V		0.095	19.76		
		256-QAM	-33.54	9.87	11.17	3.26	V		0.060	17.78		

9.2 RADIATED SPURIOUS EMISSIONS

■ NR Band:	<u>N77(78)</u>
■ Bandwidth:	<u>40 MHz</u>
■ Modulation:	<u>PI/2 BPSK</u>
■ Distance:	<u>1 meters</u>
■ SCS:	<u>30 kHz</u>

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
648000 (3720.00)	7 440.00	-42.85	11.33	-45.34	4.58	H	-38.59	-13.00	1	1
	11 160.00	-53.22	12.31	-53.48	5.83	H	-47.00	-13.00		
	14 880.00	-61.84	13.86	-44.25	6.77	V	-37.16	-13.00		
656000 (3840.00)	7 680.00	-33.02	11.60	-35.48	4.70	V	-28.58	-13.00	1	1
	11 520.00	-51.89	12.51	-51.51	5.87	H	-44.87	-13.00		
	15 360.00	-62.26	15.21	-42.64	6.88	V	-34.31	-13.00		
664000 (3960.00)	7 920.00	-44.97	11.16	-45.81	4.77	V	-39.42	-13.00	1	104
	11 880.00	-54.69	12.98	-53.10	6.03	V	-46.15	-13.00		
	15 840.00	-61.13	16.05	-42.90	6.99	H	-33.84	-13.00		

9.3 PEAK-TO-AVERAGE RATIO

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (dB)	Limit (dB)
Sub6 n77(78)	10 MHz	3840.00	BPSK	Full RB	0	4.63	13.00
			QPSK			5.70	
			16-QAM			6.83	
			64-QAM			6.66	
			256-QAM			6.72	
	15 MHz		BPSK			4.77	
			QPSK			5.98	
			16-QAM			6.77	
			64-QAM			6.72	
			256-QAM			6.94	
	20 MHz		BPSK			4.94	
			QPSK			5.88	
			16-QAM			6.74	
			64-QAM			6.86	
			256-QAM			6.72	
	25 MHz		BPSK			4.74	
			QPSK			5.85	
			16-QAM			6.63	
			64-QAM			6.82	
			256-QAM			6.96	
	30 MHz		BPSK			4.69	
			QPSK			5.94	
			16-QAM			6.58	
			64-QAM			6.79	
			256-QAM			6.83	
	40 MHz		BPSK			4.48	
			QPSK			5.90	
			16-QAM			6.55	
			64-QAM			6.69	
			256-QAM			6.82	
	50 MHz		BPSK			4.50	
			QPSK			5.80	
			16-QAM			6.47	
			64-QAM			6.66	
			256-QAM			6.80	

	60 MHz	BPSK			4.88
		QPSK			5.81
		16-QAM			6.56
		64-QAM			6.74
		256-QAM			6.78
	70 MHz	BPSK			6.17
		QPSK			6.19
		16-QAM			6.59
		64-QAM			6.74
		256-QAM			6.77
	80 MHz	BPSK			4.49
		QPSK			5.79
		16-QAM			6.52
		64-QAM			6.75
		256-QAM			6.81
	90 MHz	BPSK			4.63
		QPSK			5.79
		16-QAM			6.51
		64-QAM			6.75
		256-QAM			6.71
	100 MHz	BPSK			4.57
		QPSK			5.81
		16-QAM			6.51
		64-QAM			6.72
		256-QAM			6.83

Note:

1. Plots of the EUT's Peak- to- Average Ratio are shown Page 490 ~ 549.

9.4 OCCUPIED BANDWIDTH

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (MHz)
Sub6 n77(78)	10 MHz	3840.00	BPSK	Full RB	0	8.6480
			QPSK			8.6182
			16-QAM			8.6039
			64-QAM			8.6134
			256-QAM			8.6037
	15 MHz		BPSK			12.910
			QPSK			12.888
			16-QAM			12.881
			64-QAM			12.966
			256-QAM			12.911
	20 MHz		BPSK			17.926
			QPSK			17.908
			16-QAM			17.940
			64-QAM			17.841
			256-QAM			17.948
	25 MHz		BPSK			22.906
			QPSK			22.952
			16-QAM			22.929
			64-QAM			22.981
			256-QAM			22.909
	30 MHz		BPSK			26.867
			QPSK			26.936
			16-QAM			26.884
			64-QAM			26.912
			256-QAM			26.890
	40 MHz		BPSK			35.821
			QPSK			35.811
			16-QAM			35.965
			64-QAM			35.840
			256-QAM			35.807
	50 MHz		BPSK			45.831
			QPSK			45.806
			16-QAM			45.900
			64-QAM			45.846
			256-QAM			45.772

	60 MHz		BPSK			57.900
			QPSK			57.990
			16-QAM			57.954
			64-QAM			57.947
			256-QAM			57.878
	70 MHz		BPSK			64.444
			QPSK			64.510
			16-QAM			64.451
			64-QAM			64.368
			256-QAM			64.393
	80 MHz		BPSK			77.401
			QPSK			77.359
			16-QAM			77.446
			64-QAM			77.243
			256-QAM			77.189
	90 MHz		BPSK			87.052
			QPSK			87.069
			16-QAM			86.941
			64-QAM			86.912
			256-QAM			86.848
	100 MHz		BPSK			96.597
			QPSK			96.893
			16-QAM			96.522
			64-QAM			96.510
			256-QAM			96.629

Note:

1. Plots of the EUT's Occupied Bandwidth are shown Page 550 ~ 609.

9.5 CONDUCTED SPURIOUS EMISSIONS

Band	Band Width (MHz)	Frequency (MHz)	Frequency of Maximum Harmonic (GHz)	Factor (dB)	Measurement Maximum Data (dBm)	Result (dBm)	Limit (dBm)
Sub6 n77(78)	10	3705.000	5.48359	28.730	-62.22	-33.492	-13.00
		3840.000	4.93524	28.150	-62.35	-34.204	
		3975.000	6.00203	28.730	-61.40	-32.669	
	15	3707.520	8.40480	28.730	-62.02	-33.287	
		3840.000	5.77272	28.730	-62.09	-33.365	
		3972.480	4.72587	28.150	-62.18	-34.030	
	20	3710.010	8.66402	28.730	-61.57	-32.837	
		3840.000	8.14558	28.730	-61.84	-33.107	
		3969.990	4.96515	28.150	-62.62	-34.474	
	25	3712.500	8.83351	28.730	-61.50	-32.769	
		3840.000	8.41477	28.730	-62.26	-33.531	
		3967.500	5.71290	28.730	-62.43	-33.697	
	30	3715.020	5.16455	28.730	-62.93	-34.199	
		3840.000	4.94521	28.150	-61.81	-33.656	
		3964.980	5.22437	28.730	-62.00	-33.275	
	40	3720.000	4.99506	28.150	-62.79	-34.635	
		3840.000	5.47362	28.730	-62.13	-33.397	
		3960.000	9.93021	28.730	-62.71	-33.984	
	50	3725.010	4.89536	28.150	-62.42	-34.270	
		3840.000	4.95518	28.150	-61.67	-33.516	
		3954.990	7.19843	28.730	-62.58	-33.851	
	60	3730.020	5.99206	28.730	-62.09	-33.365	
		3840.000	4.97512	28.150	-62.43	-34.283	
		3949.980	4.96515	28.150	-61.84	-33.690	
	70	3735.000	4.94521	28.150	-62.21	-34.064	
		3840.000	5.19446	28.730	-60.99	-32.257	
		3945.000	5.71290	28.730	-62.38	-33.654	
	80	3740.010	6.03194	28.730	-61.50	-32.772	
		3840.000	4.94521	28.150	-61.13	-32.985	
		3939.990	6.00203	28.730	-62.07	-33.344	
	90	3745.020	9.85045	28.730	-62.38	-33.654	
		3840.000	4.92527	28.150	-61.40	-33.248	
		3934.980	8.24528	28.730	-62.07	-33.340	
	100	3750.000	7.74678	28.730	-62.05	-33.324	
		3840.000	9.76072	28.730	-61.95	-33.224	
		3930.000	4.91530	28.150	-61.97	-33.821	

Note:

1. Plots of the EUT's Conducted Spurious Emissions are shown Page 610 ~ 681.
2. Factor(dB) = Cable Loss + Ext. Attenuator + Power Splitter
3. Result(dBm) = Reading + Factor

Factor(dB)

Frequency Range (GHz)	Factor [dB]
0.03 – 1	27.270
1 – 5	28.150
5 – 10	28.730
10 – 15	29.330
15 – 20	30.520
Above 20	31.890

9.6 BAND EDGE

1. Plots of the EUT's Band Edge are shown Page 682 ~ 825.
2. Duty Cycle factor already applied on the factor.
 - Factor(dB) = Duty Cycle factor + Cable Loss + Ext. Attenuator + Power Splitter
 - Result(dBm) = Reading + Factor
 - Duty Cycle Factor(dB) = 6.990

9.7 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE

- ▣ BandWidth: 10 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3705.000	100 %	+20(Ref)	3704 999 999	0.0	0.000 000	0.000
	100 %	-30	3704 999 996	-3.0	0.000 000	-0.001
	100 %	-20	3704 999 996	-2.7	0.000 000	-0.001
	100 %	-10	3704 999 997	-1.5	0.000 000	0.000
	100 %	0	3704 999 998	-0.6	0.000 000	0.000
	100 %	+10	3704 999 998	-0.5	0.000 000	0.000
	100 %	+30	3704 999 994	-4.5	0.000 000	-0.001
	100 %	+40	3704 999 996	-2.5	0.000 000	-0.001
	100 %	+50	3704 999 996	-2.4	0.000 000	-0.001
	Lowest voltage	+20	3704 999 998	-0.5	0.000 000	0.000
3975.000	100 %	+20(Ref)	3974 999 992	0.0	0.000 000	0.000
	100 %	-30	3974 999 986	-6.3	0.000 000	-0.002
	100 %	-20	3974 999 985	-7.4	0.000 000	-0.002
	100 %	-10	3974 999 986	-6.2	0.000 000	-0.002
	100 %	0	3974 999 985	-7.3	0.000 000	-0.002
	100 %	+10	3974 999 986	-6.0	0.000 000	-0.001
	100 %	+30	3974 999 986	-6.0	0.000 000	-0.002
	100 %	+40	3974 999 985	-7.7	0.000 000	-0.002
	100 %	+50	3974 999 984	-7.9	0.000 000	-0.002
	Lowest voltage	+20	3974 999 985	-7.4	0.000 000	-0.002

- ▣ BandWidth: 15 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3707.520	100 %	+20(Ref)	3707 519 998	0.0	0.000 000	0.000
	100 %	-30	3707 519 996	-2.2	0.000 000	-0.001
	100 %	-20	3707 519 998	-0.7	0.000 000	0.000
	100 %	-10	3707 519 996	-2.6	0.000 000	-0.001
	100 %	0	3707 519 994	-4.6	0.000 000	-0.001
	100 %	+10	3707 519 996	-2.7	0.000 000	-0.001
	100 %	+30	3707 519 996	-2.7	0.000 000	-0.001
	100 %	+40	3707 519 995	-3.1	0.000 000	-0.001
	100 %	+50	3707 519 998	-0.6	0.000 000	0.000
	Lowest voltage	+20	3707 519 995	-3.0	0.000 000	-0.001
3972.480	100 %	+20(Ref)	3972 479 994	0.0	0.000 000	0.000
	100 %	-30	3972 479 989	-5.1	0.000 000	-0.001
	100 %	-20	3972 479 989	-5.0	0.000 000	-0.001
	100 %	-10	3972 479 990	-3.6	0.000 000	-0.001
	100 %	0	3972 479 989	-4.8	0.000 000	-0.001
	100 %	+10	3972 479 989	-5.0	0.000 000	-0.001
	100 %	+30	3972 479 988	-5.3	0.000 000	-0.001
	100 %	+40	3972 479 988	-6.1	0.000 000	-0.002
	100 %	+50	3972 479 988	-6.2	0.000 000	-0.002
	Lowest voltage	+20	3972 479 989	-4.9	0.000 000	-0.001

- ▣ BandWidth: 20 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3710.010	100 %	+20(Ref)	3710 009 997	0.0	0.000 000	0.000
	100 %	-30	3710 009 996	-0.7	0.000 000	0.000
	100 %	-20	3710 009 996	-0.6	0.000 000	0.000
	100 %	-10	3710 009 994	-3.0	0.000 000	-0.001
	100 %	0	3710 009 996	-0.6	0.000 000	0.000
	100 %	+10	3710 009 994	-2.1	0.000 000	-0.001
	100 %	+30	3710 009 995	-1.3	0.000 000	0.000
	100 %	+40	3710 009 992	-5.0	0.000 000	-0.001
	100 %	+50	3710 009 993	-3.4	0.000 000	-0.001
	Lowest voltage	+20	3710 009 994	-3.0	0.000 000	-0.001
3969.990	100 %	+20(Ref)	3969 989 994	0.0	0.000 000	0.000
	100 %	-30	3969 989 989	-5.1	0.000 000	-0.001
	100 %	-20	3969 989 987	-7.0	0.000 000	-0.002
	100 %	-10	3969 989 987	-7.4	0.000 000	-0.002
	100 %	0	3969 989 988	-6.8	0.000 000	-0.002
	100 %	+10	3969 989 987	-7.1	0.000 000	-0.002
	100 %	+30	3969 989 986	-8.0	0.000 000	-0.002
	100 %	+40	3969 989 989	-5.8	0.000 000	-0.001
	100 %	+50	3969 989 988	-5.9	0.000 000	-0.001
	Lowest voltage	+20	3969 989 991	-3.6	0.000 000	-0.001

- ▣ BandWidth: 25 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3712.500	100 %	+20(Ref)	3712 499 997	0.0	0.000 000	0.000
	100 %	-30	3712 499 995	-2.2	0.000 000	-0.001
	100 %	-20	3712 499 993	-4.1	0.000 000	-0.001
	100 %	-10	3712 499 992	-5.4	0.000 000	-0.001
	100 %	0	3712 499 992	-4.7	0.000 000	-0.001
	100 %	+10	3712 499 995	-1.5	0.000 000	0.000
	100 %	+30	3712 499 994	-3.1	0.000 000	-0.001
	100 %	+40	3712 499 994	-2.7	0.000 000	-0.001
	100 %	+50	3712 499 993	-4.2	0.000 000	-0.001
	Lowest voltage	+20	3712 499 992	-5.1	0.000 000	-0.001
3967.500	100 %	+20(Ref)	3967 499 990	0.0	0.000 000	0.000
	100 %	-30	3967 499 981	-9.0	0.000 000	-0.002
	100 %	-20	3967 499 983	-7.2	0.000 000	-0.002
	100 %	-10	3967 499 986	-4.7	0.000 000	-0.001
	100 %	0	3967 499 985	-4.8	0.000 000	-0.001
	100 %	+10	3967 499 982	-8.2	0.000 000	-0.002
	100 %	+30	3967 499 981	-8.9	0.000 000	-0.002
	100 %	+40	3967 499 983	-7.4	0.000 000	-0.002
	100 %	+50	3967 499 983	-6.9	0.000 000	-0.002
	Lowest voltage	+20	3967 499 985	-5.1	0.000 000	-0.001

- BandWidth: 30 MHz
- Voltage(100 %): 4.200 VDC
- Lowest voltage: 3.700 VDC
- LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3715.020	100 %	+20(Ref)	3715 019 997	0.0	0.000 000	0.000
	100 %	-30	3715 019 995	-2.4	0.000 000	-0.001
	100 %	-20	3715 019 995	-1.8	0.000 000	0.000
	100 %	-10	3715 019 991	-6.3	0.000 000	-0.002
	100 %	0	3715 019 990	-7.3	0.000 000	-0.002
	100 %	+10	3715 019 993	-4.2	0.000 000	-0.001
	100 %	+30	3715 019 993	-4.1	0.000 000	-0.001
	100 %	+40	3715 019 993	-4.0	0.000 000	-0.001
	100 %	+50	3715 019 996	-1.6	0.000 000	0.000
	Lowest voltage	+20	3715 019 995	-2.4	0.000 000	-0.001
3964.980	100 %	+20(Ref)	3964 979 995	0.0	0.000 000	0.000
	100 %	-30	3964 979 992	-2.5	0.000 000	-0.001
	100 %	-20	3964 979 991	-3.8	0.000 000	-0.001
	100 %	-10	3964 979 990	-4.6	0.000 000	-0.001
	100 %	0	3964 979 990	-4.8	0.000 000	-0.001
	100 %	+10	3964 979 988	-6.7	0.000 000	-0.002
	100 %	+30	3964 979 989	-5.9	0.000 000	-0.001
	100 %	+40	3964 979 989	-6.1	0.000 000	-0.002
	100 %	+50	3964 979 991	-3.3	0.000 000	-0.001
	Lowest voltage	+20	3964 979 990	-4.8	0.000 000	-0.001

- ▣ BandWidth: 40 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3720.000	100 %	+20(Ref)	3719 999 997	0.0	0.000 000	0.000
	100 %	-30	3719 999 992	-4.8	0.000 000	-0.001
	100 %	-20	3719 999 993	-3.4	0.000 000	-0.001
	100 %	-10	3719 999 992	-4.7	0.000 000	-0.001
	100 %	0	3719 999 991	-5.5	0.000 000	-0.001
	100 %	+10	3719 999 990	-6.6	0.000 000	-0.002
	100 %	+30	3719 999 993	-3.6	0.000 000	-0.001
	100 %	+40	3719 999 995	-2.4	0.000 000	-0.001
	100 %	+50	3719 999 991	-5.6	0.000 000	-0.001
	Lowest voltage	+20	3719 999 992	-4.8	0.000 000	-0.001
3960.000	100 %	+20(Ref)	3959 999 992	0.0	0.000 000	0.000
	100 %	-30	3959 999 986	-6.4	0.000 000	-0.002
	100 %	-20	3959 999 986	-5.8	0.000 000	-0.001
	100 %	-10	3959 999 987	-5.6	0.000 000	-0.001
	100 %	0	3959 999 987	-5.3	0.000 000	-0.001
	100 %	+10	3959 999 985	-7.8	0.000 000	-0.002
	100 %	+30	3959 999 984	-7.9	0.000 000	-0.002
	100 %	+40	3959 999 983	-9.5	0.000 000	-0.002
	100 %	+50	3959 999 986	-6.4	0.000 000	-0.002
	Lowest voltage	+20	3959 999 983	-9.2	0.000 000	-0.002

- ▣ BandWidth: 50 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3725.010	100 %	+20(Ref)	3725 009 995	0.0	0.000 000	0.000
	100 %	-30	3725 009 991	-3.9	0.000 000	-0.001
	100 %	-20	3725 009 991	-4.2	0.000 000	-0.001
	100 %	-10	3725 009 990	-5.3	0.000 000	-0.001
	100 %	0	3725 009 989	-5.9	0.000 000	-0.002
	100 %	+10	3725 009 990	-4.9	0.000 000	-0.001
	100 %	+30	3725 009 992	-3.0	0.000 000	-0.001
	100 %	+40	3725 009 990	-4.7	0.000 000	-0.001
	100 %	+50	3725 009 987	-8.1	0.000 000	-0.002
	Lowest voltage	+20	3725 009 988	-7.2	0.000 000	-0.002
3954.990	100 %	+20(Ref)	3954 989 997	0.0	0.000 000	0.000
	100 %	-30	3954 989 994	-3.2	0.000 000	-0.001
	100 %	-20	3954 989 992	-5.2	0.000 000	-0.001
	100 %	-10	3954 989 993	-4.5	0.000 000	-0.001
	100 %	0	3954 989 993	-4.0	0.000 000	-0.001
	100 %	+10	3954 989 995	-2.8	0.000 000	-0.001
	100 %	+30	3954 989 992	-5.4	0.000 000	-0.001
	100 %	+40	3954 989 994	-3.7	0.000 000	-0.001
	100 %	+50	3954 989 994	-3.6	0.000 000	-0.001
	Lowest voltage	+20	3954 989 994	-3.1	0.000 000	-0.001

- ▣ BandWidth: 60 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3730.020	100 %	+20(Ref)	3730 019 998	0.0	0.000 000	0.000
	100 %	-30	3730 019 996	-1.9	0.000 000	0.000
	100 %	-20	3730 019 997	-1.4	0.000 000	0.000
	100 %	-10	3730 019 995	-2.9	0.000 000	-0.001
	100 %	0	3730 019 995	-3.2	0.000 000	-0.001
	100 %	+10	3730 019 996	-2.1	0.000 000	-0.001
	100 %	+30	3730 019 996	-2.1	0.000 000	-0.001
	100 %	+40	3730 019 995	-2.7	0.000 000	-0.001
	100 %	+50	3730 019 995	-2.9	0.000 000	-0.001
	Lowest voltage	+20	3730 019 991	-6.8	0.000 000	-0.002
3949.980	100 %	+20(Ref)	3949 979 992	0.0	0.000 000	0.000
	100 %	-30	3949 979 987	-5.6	0.000 000	-0.001
	100 %	-20	3949 979 985	-7.0	0.000 000	-0.002
	100 %	-10	3949 979 985	-7.6	0.000 000	-0.002
	100 %	0	3949 979 988	-4.7	0.000 000	-0.001
	100 %	+10	3949 979 987	-5.7	0.000 000	-0.001
	100 %	+30	3949 979 986	-6.9	0.000 000	-0.002
	100 %	+40	3949 979 985	-6.9	0.000 000	-0.002
	100 %	+50	3949 979 987	-5.4	0.000 000	-0.001
	Lowest voltage	+20	3949 979 987	-5.1	0.000 000	-0.001

- ▣ BandWidth: 70 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3735.000	100 %	+20(Ref)	3734 999 997	0.0	0.000 000	0.000
	100 %	-30	3734 999 992	-5.4	0.000 000	-0.001
	100 %	-20	3734 999 991	-5.8	0.000 000	-0.002
	100 %	-10	3734 999 991	-5.7	0.000 000	-0.002
	100 %	0	3734 999 991	-6.5	0.000 000	-0.002
	100 %	+10	3734 999 994	-3.5	0.000 000	-0.001
	100 %	+30	3734 999 991	-6.0	0.000 000	-0.002
	100 %	+40	3734 999 991	-6.4	0.000 000	-0.002
	100 %	+50	3734 999 991	-6.0	0.000 000	-0.002
	Lowest voltage	+20	3734 999 993	-4.5	0.000 000	-0.001
3945.000	100 %	+20(Ref)	3944 999 992	0.0	0.000 000	0.000
	100 %	-30	3944 999 987	-5.6	0.000 000	-0.001
	100 %	-20	3944 999 988	-4.6	0.000 000	-0.001
	100 %	-10	3944 999 987	-5.5	0.000 000	-0.001
	100 %	0	3944 999 986	-6.3	0.000 000	-0.002
	100 %	+10	3944 999 986	-6.2	0.000 000	-0.002
	100 %	+30	3944 999 985	-6.8	0.000 000	-0.002
	100 %	+40	3944 999 986	-5.8	0.000 000	-0.001
	100 %	+50	3944 999 985	-7.3	0.000 000	-0.002
	Lowest voltage	+20	3944 999 986	-6.2	0.000 000	-0.002

- ▣ BandWidth: 80 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3740.010	100 %	+20(Ref)	3740 009 995	0.0	0.000 000	0.000
	100 %	-30	3740 009 989	-6.1	0.000 000	-0.002
	100 %	-20	3740 009 989	-6.2	0.000 000	-0.002
	100 %	-10	3740 009 992	-3.7	0.000 000	-0.001
	100 %	0	3740 009 992	-3.0	0.000 000	-0.001
	100 %	+10	3740 009 989	-6.4	0.000 000	-0.002
	100 %	+30	3740 009 990	-5.0	0.000 000	-0.001
	100 %	+40	3740 009 991	-4.7	0.000 000	-0.001
	100 %	+50	3740 009 990	-5.6	0.000 000	-0.002
	Lowest voltage	+20	3740 009 988	-6.9	0.000 000	-0.002
3939.990	100 %	+20(Ref)	3939 989 991	0.0	0.000 000	0.000
	100 %	-30	3939 989 982	-9.2	0.000 000	-0.002
	100 %	-20	3939 989 985	-5.8	0.000 000	-0.001
	100 %	-10	3939 989 983	-8.4	0.000 000	-0.002
	100 %	0	3939 989 984	-7.5	0.000 000	-0.002
	100 %	+10	3939 989 987	-4.6	0.000 000	-0.001
	100 %	+30	3939 989 985	-5.8	0.000 000	-0.001
	100 %	+40	3939 989 985	-5.9	0.000 000	-0.001
	100 %	+50	3939 989 986	-5.2	0.000 000	-0.001
	Lowest voltage	+20	3939 989 988	-3.4	0.000 000	-0.001

- ▣ BandWidth: 90 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3745.020	100 %	+20(Ref)	3745 019 995	0.0	0.000 000	0.000
	100 %	-30	3745 019 991	-4.6	0.000 000	-0.001
	100 %	-20	3745 019 992	-3.7	0.000 000	-0.001
	100 %	-10	3745 019 994	-1.1	0.000 000	0.000
	100 %	0	3745 019 992	-3.8	0.000 000	-0.001
	100 %	+10	3745 019 994	-1.9	0.000 000	-0.001
	100 %	+30	3745 019 994	-1.6	0.000 000	0.000
	100 %	+40	3745 019 991	-4.8	0.000 000	-0.001
	100 %	+50	3745 019 995	-0.7	0.000 000	0.000
	Lowest voltage	+20	3745 019 992	-3.2	0.000 000	-0.001
3934.980	100 %	+20(Ref)	3934 979 992	0.0	0.000 000	0.000
	100 %	-30	3934 979 985	-7.2	0.000 000	-0.002
	100 %	-20	3934 979 985	-7.4	0.000 000	-0.002
	100 %	-10	3934 979 987	-5.9	0.000 000	-0.002
	100 %	0	3934 979 984	-8.0	0.000 000	-0.002
	100 %	+10	3934 979 988	-4.4	0.000 000	-0.001
	100 %	+30	3934 979 985	-7.0	0.000 000	-0.002
	100 %	+40	3934 979 986	-6.0	0.000 000	-0.002
	100 %	+50	3934 979 986	-6.0	0.000 000	-0.002
	Lowest voltage	+20	3934 979 984	-8.2	0.000 000	-0.002

- ▣ BandWidth: 100 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3750.000	100 %	+20(Ref)	3749 999 996	0.0	0.000 000	0.000
	100 %	-30	3749 999 990	-5.7	0.000 000	-0.002
	100 %	-20	3749 999 991	-5.0	0.000 000	-0.001
	100 %	-10	3749 999 991	-4.7	0.000 000	-0.001
	100 %	0	3749 999 994	-1.6	0.000 000	0.000
	100 %	+10	3749 999 993	-3.1	0.000 000	-0.001
	100 %	+30	3749 999 992	-4.1	0.000 000	-0.001
	100 %	+40	3749 999 995	-1.3	0.000 000	0.000
	100 %	+50	3749 999 991	-5.0	0.000 000	-0.001
	Lowest voltage	+20	3749 999 993	-3.1	0.000 000	-0.001
3930.000	100 %	+20(Ref)	3929 999 993	0.0	0.000 000	0.000
	100 %	-30	3929 999 986	-6.8	0.000 000	-0.002
	100 %	-20	3929 999 986	-6.2	0.000 000	-0.002
	100 %	-10	3929 999 987	-5.3	0.000 000	-0.001
	100 %	0	3929 999 986	-6.7	0.000 000	-0.002
	100 %	+10	3929 999 984	-8.3	0.000 000	-0.002
	100 %	+30	3929 999 986	-6.5	0.000 000	-0.002
	100 %	+40	3929 999 985	-7.0	0.000 000	-0.002
	100 %	+50	3929 999 983	-9.9	0.000 000	-0.003
	Lowest voltage	+20	3929 999 983	-9.1	0.000 000	-0.002

10. TEST DATA (MIMO2, 3450 MHz - 3550 MHz)

10.1 EQUIVALENT ISOTROPIC RADIATED POWER

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3455.01	Sub6 n77/ 10 MHz [30 kHz]	PI/2 BPSK	-27.80	13.13	11.47	3.04	V	< 1.00	0.143	21.56	1	1
		QPSK	-28.04	12.89	11.47	3.04	V		0.136	21.32		
		16-QAM	-27.83	13.10	11.47	3.04	V		0.142	21.53		
		64-QAM	-27.85	13.08	11.47	3.04	V		0.142	21.51		
		256-QAM	-29.96	10.97	11.47	3.04	V		0.087	19.40		
3500.01		PI/2 BPSK	-29.56	11.31	11.59	3.04	V		0.097	19.86	1	22
		QPSK	-29.72	11.15	11.59	3.04	V		0.093	19.70		
		16-QAM	-29.89	10.98	11.59	3.04	V		0.090	19.53		
		64-QAM	-30.09	10.78	11.59	3.04	V		0.086	19.33		
		256-QAM	-32.03	8.84	11.59	3.04	V		0.055	17.39		
3544.99		PI/2 BPSK	-28.18	12.60	11.65	3.07	V		0.131	21.18	1	1
		QPSK	-28.26	12.52	11.65	3.07	V		0.129	21.10		
		16-QAM	-28.36	12.42	11.65	3.07	V		0.126	21.00		
		64-QAM	-28.52	12.26	11.65	3.07	V		0.121	20.84		
		256-QAM	-31.11	9.67	11.65	3.07	V		0.067	18.25		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3457.50	Sub6 n77/ 15 MHz [30 kHz]	PI/2 BPSK	-27.60	13.33	11.48	3.04	V	< 1.00	0.150	21.77	1	1
		QPSK	-27.95	12.98	11.48	3.04	V		0.139	21.42		
		16-QAM	-27.87	13.06	11.48	3.04	V		0.141	21.50		
		64-QAM	-28.17	12.76	11.48	3.04	V		0.132	21.20		
		256-QAM	-30.24	10.69	11.48	3.04	V		0.082	19.13		
3500.01		PI/2 BPSK	-29.20	11.67	11.59	3.04	V		0.105	20.22	1	1
		QPSK	-29.23	11.64	11.59	3.04	V		0.104	20.19		
		16-QAM	-29.47	11.40	11.59	3.04	V		0.099	19.95		
		64-QAM	-29.50	11.37	11.59	3.04	V		0.098	19.92		
		256-QAM	-31.92	8.95	11.59	3.04	V		0.056	17.50		
3542.50		PI/2 BPSK	-28.05	12.73	11.65	3.07	V		0.135	21.31	1	1
		QPSK	-28.48	12.30	11.65	3.07	V		0.122	20.88		
		16-QAM	-28.33	12.45	11.65	3.07	V		0.127	21.03		
		64-QAM	-28.35	12.43	11.65	3.07	V		0.126	21.01		
		256-QAM	-30.53	10.25	11.65	3.07	V		0.076	18.83		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3460.02	Sub6 n77/ 20 MHz [30 kHz]	PI/2 BPSK	-27.59	13.34	11.48	3.04	V	< 1.00	0.151	21.78	1	1
		QPSK	-27.80	13.13	11.48	3.04	V		0.144	21.57		
		16-QAM	-27.82	13.11	11.48	3.04	V		0.143	21.55		
		64-QAM	-27.88	13.05	11.48	3.04	V		0.141	21.49		
		256-QAM	-30.25	10.68	11.48	3.04	V		0.082	19.12		
3500.01		PI/2 BPSK	-28.94	11.93	11.59	3.04	V		0.112	20.48	1	1
		QPSK	-29.24	11.63	11.59	3.04	V		0.104	20.18		
		16-QAM	-29.08	11.79	11.59	3.04	V		0.108	20.34		
		64-QAM	-29.36	11.51	11.59	3.04	V		0.101	20.06		
		256-QAM	-31.42	9.45	11.59	3.04	V		0.063	18.00		
3540.00		PI/2 BPSK	-27.85	12.94	11.64	3.06	V		0.142	21.52	1	1
		QPSK	-28.17	12.62	11.64	3.06	V		0.132	21.20		
		16-QAM	-27.93	12.86	11.64	3.06	V		0.139	21.44		
		64-QAM	-28.25	12.54	11.64	3.06	V		0.129	21.12		
		256-QAM	-30.39	10.40	11.64	3.06	V		0.079	18.98		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3462.50	Sub6 n77/ 25 MHz [30 kHz]	PI/2 BPSK	-27.89	13.03	11.50	3.02	V	< 1.00	0.142	21.51	1	1
		QPSK	-28.09	12.83	11.50	3.02	V		0.135	21.31		
		16-QAM	-28.05	12.87	11.50	3.02	V		0.136	21.35		
		64-QAM	-28.42	12.50	11.50	3.02	V		0.125	20.98		
		256-QAM	-30.26	10.66	11.50	3.02	V		0.082	19.14		
3500.01		PI/2 BPSK	-28.74	12.13	11.59	3.04	V		0.117	20.68	1	1
		QPSK	-28.81	12.06	11.59	3.04	V		0.115	20.61		
		16-QAM	-28.78	12.09	11.59	3.04	V		0.116	20.64		
		64-QAM	-29.23	11.64	11.59	3.04	V		0.104	20.19		
		256-QAM	-31.59	9.28	11.59	3.04	V		0.061	17.83		
3537.50		PI/2 BPSK	-27.76	13.03	11.64	3.06	V		0.145	21.61	1	1
		QPSK	-27.94	12.85	11.64	3.06	V		0.139	21.43		
		16-QAM	-27.82	12.97	11.64	3.06	V		0.143	21.55		
		64-QAM	-28.18	12.61	11.64	3.06	V		0.132	21.19		
		256-QAM	-30.34	10.45	11.64	3.06	V		0.080	19.03		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3465.00	Sub6 n77/ 30 MHz [30 kHz]	PI/2 BPSK	-27.30	13.62	11.50	3.02	H	< 1.00	0.162	22.10	1	1
		QPSK	-27.68	13.24	11.50	3.02	H		0.149	21.72		
		16-QAM	-27.62	13.30	11.50	3.02	H		0.151	21.78		
		64-QAM	-28.07	12.85	11.50	3.02	H		0.136	21.33		
		256-QAM	-30.41	10.51	11.50	3.02	H		0.079	18.99		
3500.01		PI/2 BPSK	-28.52	12.35	11.59	3.04	H		0.123	20.90	1	1
		QPSK	-28.59	12.28	11.59	3.04	H		0.121	20.83		
		16-QAM	-28.58	12.29	11.59	3.04	H		0.121	20.84		
		64-QAM	-29.48	11.39	11.59	3.04	H		0.099	19.94		
		256-QAM	-31.49	9.38	11.59	3.04	H		0.062	17.93		
3534.99		PI/2 BPSK	-27.52	13.26	11.64	3.05	H		0.153	21.85	1	1
		QPSK	-27.74	13.04	11.64	3.05	H		0.146	21.63		
		16-QAM	-27.54	13.24	11.64	3.05	H		0.152	21.83		
		64-QAM	-28.28	12.50	11.64	3.05	H		0.129	21.09		
		256-QAM	-30.67	10.11	11.64	3.05	H		0.074	18.70		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3470.01	Sub6 n77/ 40 MHz [30 kHz]	PI/2 BPSK	-27.39	13.54	11.51	3.01	V	< 1.00	0.160	22.04	1	1
		QPSK	-27.42	13.51	11.51	3.01	V		0.159	22.01		
		16-QAM	-27.58	13.35	11.51	3.01	V		0.153	21.85		
		64-QAM	-28.14	12.79	11.51	3.01	V		0.135	21.29		
		256-QAM	-29.83	11.10	11.51	3.01	V		0.091	19.60		
3500.01		PI/2 BPSK	-28.61	12.26	11.59	3.04	V		0.121	20.81	1	1
		QPSK	-28.89	11.98	11.59	3.04	V		0.113	20.53		
		16-QAM	-28.64	12.23	11.59	3.04	V		0.120	20.78		
		64-QAM	-29.56	11.31	11.59	3.04	V		0.097	19.86		
		256-QAM	-31.79	9.08	11.59	3.04	V		0.058	17.63		
3529.98		PI/2 BPSK	-27.53	13.27	11.63	3.05	V		0.153	21.85	1	1
		QPSK	-27.56	13.24	11.63	3.05	V		0.152	21.82		
		16-QAM	-27.67	13.13	11.63	3.05	V		0.148	21.71		
		64-QAM	-28.01	12.79	11.63	3.05	V		0.137	21.37		
		256-QAM	-29.86	10.94	11.63	3.05	V		0.090	19.52		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3475.02	Sub6 n77/ 50 MHz [30 kHz]	PI/2 BPSK	-27.62	13.31	11.52	3.02	V	< 1.00	0.152	21.81	1	1
		QPSK	-27.70	13.23	11.52	3.02	V		0.149	21.73		
		16-QAM	-27.71	13.22	11.52	3.02	V		0.149	21.72		
		64-QAM	-28.07	12.86	11.52	3.02	V		0.137	21.36		
		256-QAM	-30.77	10.16	11.52	3.02	V		0.073	18.66		
3500.01		PI/2 BPSK	-28.37	12.50	11.59	3.04	V		0.127	21.05	1	1
		QPSK	-28.63	12.24	11.59	3.04	V		0.120	20.79		
		16-QAM	-28.78	12.09	11.59	3.04	V		0.116	20.64		
		64-QAM	-29.32	11.55	11.59	3.04	V		0.102	20.10		
		256-QAM	-31.73	9.14	11.59	3.04	V		0.059	17.69		
3525.00		PI/2 BPSK	-27.35	13.45	11.62	3.04	V		0.160	22.03	1	1
		QPSK	-27.46	13.34	11.62	3.04	V		0.156	21.92		
		16-QAM	-27.41	13.39	11.62	3.04	V		0.157	21.97		
		64-QAM	-27.98	12.82	11.62	3.04	V		0.138	21.40		
		256-QAM	-29.91	10.89	11.62	3.04	V		0.089	19.47		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3480.00	Sub6 n77/ 60 MHz [30 kHz]	PI/2 BPSK	-27.06	13.86	11.54	3.02	V	< 1.00	0.173	22.38	1	1
		QPSK	-27.23	13.69	11.54	3.02	V		0.166	22.21		
		16-QAM	-27.30	13.62	11.54	3.02	V		0.164	22.14		
		64-QAM	-27.49	13.43	11.54	3.02	V		0.157	21.95		
		256-QAM	-29.53	11.39	11.54	3.02	V		0.098	19.91		
3500.01		PI/2 BPSK	-28.45	12.42	11.59	3.04	V		0.125	20.97	1	1
		QPSK	-28.71	12.16	11.59	3.04	V		0.118	20.71		
		16-QAM	-28.51	12.36	11.59	3.04	V		0.123	20.91		
		64-QAM	-28.90	11.97	11.59	3.04	V		0.113	20.52		
		256-QAM	-31.12	9.75	11.59	3.04	V		0.068	18.30		
3519.99		PI/2 BPSK	-27.08	13.72	11.62	3.04	V		0.170	22.30	1	1
		QPSK	-27.10	13.70	11.62	3.04	V		0.169	22.28		
		16-QAM	-27.20	13.60	11.62	3.04	V		0.165	22.18		
		64-QAM	-27.67	13.13	11.62	3.04	V		0.148	21.71		
		256-QAM	-30.11	10.69	11.62	3.04	V		0.085	19.27		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3485.01	Sub6 n77/ 70 MHz [30 kHz]	PI/2 BPSK	-27.56	13.37	11.55	3.03	H	< 1.00	0.155	21.89	1	1
		QPSK	-27.85	13.08	11.55	3.03	H		0.145	21.60		
		16-QAM	-27.67	13.26	11.55	3.03	H		0.151	21.78		
		64-QAM	-28.13	12.80	11.55	3.03	H		0.136	21.32		
		256-QAM	-30.16	10.77	11.55	3.03	H		0.085	19.29		
3500.01		PI/2 BPSK	-28.41	12.46	11.59	3.04	H		0.126	21.01	1	1
		QPSK	-28.64	12.23	11.59	3.04	H		0.120	20.78		
		16-QAM	-28.74	12.13	11.59	3.04	H		0.117	20.68		
		64-QAM	-28.98	11.89	11.59	3.04	H		0.111	20.44		
		256-QAM	-31.59	9.28	11.59	3.04	H		0.061	17.83		
3514.98		PI/2 BPSK	-27.79	13.02	11.61	3.04	H		0.144	21.59	1	1
		QPSK	-27.93	12.88	11.61	3.04	H		0.140	21.45		
		16-QAM	-27.86	12.95	11.61	3.04	H		0.142	21.52		
		64-QAM	-28.34	12.47	11.61	3.04	H		0.127	21.04		
		256-QAM	-30.48	10.33	11.61	3.04	H		0.078	18.90		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3490.02	Sub6 n77/ 80 MHz [30 kHz]	PI/2 BPSK	-27.71	13.22	11.56	3.04	V	< 1.00	0.149	21.74	1	1
		QPSK	-27.75	13.18	11.56	3.04	V		0.148	21.70		
		16-QAM	-27.72	13.21	11.56	3.04	V		0.149	21.73		
		64-QAM	-28.08	12.85	11.56	3.04	V		0.137	21.37		
		256-QAM	-30.70	10.23	11.56	3.04	V		0.075	18.75		
3500.01		PI/2 BPSK	-28.26	12.61	11.59	3.04	V		0.131	21.16	1	1
		QPSK	-28.48	12.39	11.59	3.04	V		0.124	20.94		
		16-QAM	-28.68	12.19	11.59	3.04	V		0.119	20.74		
		64-QAM	-28.95	11.92	11.59	3.04	V		0.111	20.47		
		256-QAM	-31.01	9.86	11.59	3.04	V		0.069	18.41		
3510.00		PI/2 BPSK	-27.63	13.19	11.60	3.05	V		0.149	21.74	1	1
		QPSK	-27.86	12.96	11.60	3.05	V		0.142	21.51		
		16-QAM	-27.69	13.13	11.60	3.05	V		0.147	21.68		
		64-QAM	-28.10	12.72	11.60	3.05	V		0.134	21.27		
		256-QAM	-30.70	10.12	11.60	3.05	V		0.074	18.67		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3495.00	Sub6 n77/ 90 MHz [30 kHz]	PI/2 BPSK	-27.62	13.29	11.57	3.04	V	< 1.00	0.152	21.82	1	1
		QPSK	-27.92	12.99	11.57	3.04	V		0.142	21.52		
		16-QAM	-27.76	13.15	11.57	3.04	V		0.147	21.68		
		64-QAM	-28.31	12.60	11.57	3.04	V		0.130	21.13		
		256-QAM	-30.56	10.35	11.57	3.04	V		0.077	18.88		
3500.01		PI/2 BPSK	-27.68	13.19	11.59	3.04	V		0.149	21.74	1	1
		QPSK	-27.86	13.01	11.59	3.04	V		0.143	21.56		
		16-QAM	-27.98	12.89	11.59	3.04	V		0.139	21.44		
		64-QAM	-28.16	12.71	11.59	3.04	V		0.134	21.26		
		256-QAM	-30.37	10.50	11.59	3.04	V		0.080	19.05		
3504.99		PI/2 BPSK	-28.30	12.56	11.59	3.05	V		0.129	21.10	1	1
		QPSK	-28.36	12.50	11.59	3.05	V		0.127	21.04		
		16-QAM	-28.54	12.32	11.59	3.05	V		0.122	20.86		
		64-QAM	-28.52	12.34	11.59	3.05	V		0.122	20.88		
		256-QAM	-31.19	9.67	11.59	3.05	V		0.066	18.21		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3500.01	Sub6 n77/ 100 MHz [30 kHz]	PI/2 BPSK	-27.66	13.21	11.59	3.04	V	< 1.00	0.150	21.76	1	1
		QPSK	-27.79	13.08	11.59	3.04	V		0.146	21.63		
		16-QAM	-27.82	13.05	11.59	3.04	V		0.145	21.60		
		64-QAM	-28.27	12.60	11.59	3.04	V		0.130	21.15		
		256-QAM	-30.66	10.21	11.59	3.04	V		0.075	18.76		

10.2 RADIATED SPURIOUS EMISSIONS

NR Band:	<u>N77</u>
Bandwidth:	<u>60 MHz</u>
Modulation:	<u>PI/2 BPSK</u>
Distance:	<u>1 meters</u>
SCS:	<u>30 kHz</u>

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
632000 (3480.00)	6 960.00	-53.96	11.18	-56.68	4.44	V	-49.94	-13.00	1	1
	10 440.00	-53.66	11.73	-54.27	5.57	H	-48.11	-13.00		
	13 920.00	-60.03	13.23	-48.61	6.54	V	-41.92	-13.00		
	17 400.00	-62.07	17.61	-39.83	7.48	H	-29.70	-13.00		
633334 (3500.01)	7 000.02	-54.44	11.14	-57.04	4.45	H	-50.35	-13.00	1	1
	10 500.03	-53.81	11.71	-54.22	5.64	V	-48.15	-13.00		
	14 000.04	-60.37	13.09	-48.45	6.55	H	-41.91	-13.00		
	17 500.05	-62.65	17.36	-37.60	7.42	V	-27.66	-13.00		
634666 (3519.99)	7 039.98	-50.98	11.02	-53.76	4.45	V	-47.19	-13.00	1	1
	10 559.97	-52.74	11.66	-53.24	5.63	H	-47.21	-13.00		
	14 079.96	-60.44	13.00	-47.42	6.55	V	-40.97	-13.00		
	17 599.95	-62.58	17.07	-36.22	7.46	H	-26.61	-13.00		

10.3 PEAK-TO-AVERAGE RATIO

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (dB)	Limit (dB)
Sub6 n77	10 MHz	3500.01	BPSK	Full RB	0	5.42	13.00
			QPSK			5.87	
			16-QAM			6.47	
			64-QAM			6.31	
			256-QAM			6.82	
	15 MHz		BPSK			4.52	
			QPSK			5.84	
			16-QAM			6.41	
			64-QAM			6.51	
			256-QAM			6.70	
	20 MHz		BPSK			5.45	
			QPSK			5.86	
			16-QAM			6.59	
			64-QAM			6.65	
			256-QAM			6.73	
	25 MHz		BPSK			5.05	
			QPSK			5.81	
			16-QAM			6.61	
			64-QAM			6.66	
			256-QAM			6.85	
	30 MHz		BPSK			4.60	
			QPSK			5.79	
			16-QAM			6.55	
			64-QAM			6.70	
			256-QAM			6.63	
	40 MHz		BPSK			4.50	
			QPSK			5.75	
			16-QAM			6.49	
			64-QAM			6.57	
			256-QAM			6.66	
	50 MHz		BPSK			4.64	
			QPSK			5.70	
			16-QAM			6.51	
			64-QAM			6.70	
			256-QAM			6.78	

	60 MHz	BPSK			4.54	
		QPSK			5.80	
		16-QAM			6.45	
		64-QAM			6.55	
		256-QAM			6.70	
	70 MHz	BPSK			4.64	
		QPSK			5.73	
		16-QAM			6.44	
		64-QAM			6.56	
		256-QAM			6.72	
	80 MHz	BPSK			4.49	
		QPSK			5.75	
		16-QAM			6.43	
		64-QAM			6.60	
		256-QAM			6.71	
	90 MHz	BPSK			4.52	
		QPSK			5.76	
		16-QAM			6.47	
		64-QAM			6.67	
		256-QAM			6.67	
	100 MHz	BPSK			4.51	
		QPSK			5.68	
		16-QAM			6.43	
		64-QAM			6.63	
		256-QAM			6.68	

Note:

1. Plots of the EUT's Peak- to- Average Ratio are shown Page 827 ~ 886.

10.4 OCCUPIED BANDWIDTH

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (MHz)
Sub6 n77	10 MHz	3500.01	BPSK	Full RB	0	8.5780
			QPSK			8.6100
			16-QAM			8.6238
			64-QAM			8.6071
			256-QAM			8.6289
	15 MHz		BPSK			12.979
			QPSK			12.932
			16-QAM			12.906
			64-QAM			12.892
			256-QAM			12.957
	20 MHz		BPSK			17.928
			QPSK			17.904
			16-QAM			17.953
			64-QAM			17.874
			256-QAM			17.961
	25 MHz		BPSK			22.919
			QPSK			22.903
			16-QAM			22.948
			64-QAM			22.877
			256-QAM			22.911
	30 MHz		BPSK			26.806
			QPSK			26.855
			16-QAM			26.909
			64-QAM			26.941
			256-QAM			26.833
	40 MHz		BPSK			35.800
			QPSK			35.797
			16-QAM			35.763
			64-QAM			35.902
			256-QAM			35.804
	50 MHz		BPSK			45.829
			QPSK			45.852
			16-QAM			45.900
			64-QAM			45.849
			256-QAM			45.802

	60 MHz		BPSK			57.903
			QPSK			57.777
			16-QAM			57.803
			64-QAM			57.890
			256-QAM			57.861
	70 MHz		BPSK			64.468
			QPSK			64.630
			16-QAM			64.519
			64-QAM			64.314
			256-QAM			64.517
	80 MHz		BPSK			77.243
			QPSK			77.208
			16-QAM			77.165
			64-QAM			77.073
			256-QAM			77.034
	90 MHz		BPSK			86.677
			QPSK			86.840
			16-QAM			87.077
			64-QAM			87.036
			256-QAM			86.683
	100 MHz		BPSK			96.468
			QPSK			96.615
			16-QAM			96.508
			64-QAM			96.480
			256-QAM			96.409

Note:

1. Plots of the EUT's Occupied Bandwidth are shown Page 887 ~ 946.

10.5 CONDUCTED SPURIOUS EMISSIONS

Band	Band Width (MHz)	Frequency (MHz)	Frequency of Maximum Harmonic (GHz)	Factor (dB)	Measurement Maximum Data (dBm)	Result (dBm)	Limit (dBm)
Sub6 n77	10	3455.010	6.00203	28.730	-62.61	-33.877	-13.00
		3500.010	5.22437	28.730	-62.10	-33.366	
		3544.980	4.95518	28.150	-62.51	-34.363	
	15	3457.500	5.14461	28.730	-62.88	-34.148	
		3500.010	9.78066	28.730	-62.55	-33.823	
		3542.490	7.18846	28.730	-61.17	-32.437	
	20	3460.020	5.19446	28.730	-61.65	-32.924	
		3500.010	9.77069	28.730	-61.41	-32.683	
		3540.000	4.96515	28.150	-62.60	-34.453	
	25	3462.510	9.44168	28.730	-63.31	-34.575	
		3500.010	8.91327	28.730	-62.63	-33.896	
		3537.480	7.12864	28.730	-61.90	-33.168	
	30	3465.000	5.98209	28.730	-61.71	-32.984	
		3500.010	4.96515	28.150	-62.20	-34.054	
		3534.990	4.88539	28.150	-62.36	-34.206	
	40	3470.010	7.20840	28.730	-62.05	-33.320	
		3500.010	4.99506	28.150	-62.36	-34.213	
		3529.980	6.06185	28.730	-62.10	-33.365	
	50	3475.020	4.92527	28.150	-61.89	-33.743	
		3500.010	4.69596	28.150	-62.50	-34.345	
		3525.000	5.79266	28.730	-61.13	-32.398	
	60	3480.000	4.27722	28.150	-62.51	-34.362	
		3500.010	4.92527	28.150	-61.78	-33.626	
		3519.990	5.19446	28.730	-62.45	-33.718	
	70	3485.010	7.14858	28.730	-61.69	-32.964	
		3500.010	7.47759	28.730	-63.09	-34.362	
		3514.980	4.94521	28.150	-62.32	-34.165	
	80	3490.020	8.07579	28.730	-60.60	-31.868	
		3500.010	4.85548	28.150	-61.54	-33.392	
		3510.000	5.17452	28.730	-61.37	-32.637	
	90	3495.000	9.10270	28.730	-61.94	-33.215	
		3500.010	4.94521	28.150	-61.65	-33.503	
		3504.990	8.64408	28.730	-62.51	-33.780	
	100	3500.010	9.78066	28.730	-62.01	-33.280	

Note:

1. Plots of the EUT's Conducted Spurious Emissions are shown Page 947 ~ 1014.
2. Factor(dB) = Cable Loss + Ext. Attenuator + Power Splitter
3. Result(dBm) = Reading + Factor

Factor(dB)

Frequency Range (GHz)	Factor [dB]
0.03 – 1	27.270
1 – 5	28.150
5 – 10	28.730
10 – 15	29.330
15 – 20	30.520
Above 20	31.890

10.6 BAND EDGE

1. Plots of the EUT's Band Edge are shown Page 1015 ~ 1158.
2. Duty Cycle factor already applied on the factor.
 - Factor(dB) = Duty Cycle factor + Cable Loss + Ext. Attenuator + Power Splitter
 - Result(dBm) = Reading + Factor
 - Duty Cycle Factor(dB) = 6.990

10.7 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE

- ▣ BandWidth: 10 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3455.010	100 %	+20(Ref)	3455 009 994	0.0	0.000 000	0.000
	100 %	-30	3455 009 990	-4.2	0.000 000	-0.001
	100 %	-20	3455 009 991	-3.1	0.000 000	-0.001
	100 %	-10	3455 009 988	-6.5	0.000 000	-0.002
	100 %	0	3455 009 991	-2.9	0.000 000	-0.001
	100 %	+10	3455 009 991	-3.0	0.000 000	-0.001
	100 %	+30	3455 009 989	-5.3	0.000 000	-0.002
	100 %	+40	3455 009 989	-4.9	0.000 000	-0.001
	100 %	+50	3455 009 990	-4.0	0.000 000	-0.001
	Lowest voltage	+20	3455 009 991	-3.1	0.000 000	-0.001
3544.980	100 %	+20(Ref)	3544 979 995	0.0	0.000 000	0.000
	100 %	-30	3544 979 991	-3.7	0.000 000	-0.001
	100 %	-20	3544 979 988	-6.7	0.000 000	-0.002
	100 %	-10	3544 979 989	-5.6	0.000 000	-0.002
	100 %	0	3544 979 987	-7.5	0.000 000	-0.002
	100 %	+10	3544 979 992	-3.0	0.000 000	-0.001
	100 %	+30	3544 979 988	-6.9	0.000 000	-0.002
	100 %	+40	3544 979 989	-6.4	0.000 000	-0.002
	100 %	+50	3544 979 988	-6.6	0.000 000	-0.002
	Lowest voltage	+20	3544 979 990	-5.1	0.000 000	-0.001

- ▣ BandWidth: 15 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3457.500	100 %	+20(Ref)	3457 500 000	0.0	0.000 000	0.000
	100 %	-30	3457 499 998	-2.1	0.000 000	-0.001
	100 %	-20	3457 499 999	-0.6	0.000 000	0.000
	100 %	-10	3457 499 997	-3.1	0.000 000	-0.001
	100 %	0	3457 499 996	-3.6	0.000 000	-0.001
	100 %	+10	3457 499 997	-2.8	0.000 000	-0.001
	100 %	+30	3457 499 994	-5.4	0.000 000	-0.002
	100 %	+40	3457 499 996	-3.7	0.000 000	-0.001
	100 %	+50	3457 499 997	-2.7	0.000 000	-0.001
	Lowest voltage	+20	3457 499 997	-2.6	0.000 000	-0.001
3542.490	100 %	+20(Ref)	3542 489 996	0.0	0.000 000	0.000
	100 %	-30	3542 489 991	-4.3	0.000 000	-0.001
	100 %	-20	3542 489 991	-4.4	0.000 000	-0.001
	100 %	-10	3542 489 990	-5.2	0.000 000	-0.001
	100 %	0	3542 489 991	-4.9	0.000 000	-0.001
	100 %	+10	3542 489 993	-2.2	0.000 000	-0.001
	100 %	+30	3542 489 992	-3.5	0.000 000	-0.001
	100 %	+40	3542 489 989	-6.2	0.000 000	-0.002
	100 %	+50	3542 489 992	-3.8	0.000 000	-0.001
	Lowest voltage	+20	3542 489 991	-4.6	0.000 000	-0.001

- ▣ BandWidth: 20 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3460.020	100 %	+20(Ref)	3460 020 000	0.0	0.000 000	0.000
	100 %	-30	3460 020 001	1.1	0.000 000	0.000
	100 %	-20	3460 019 999	-0.7	0.000 000	0.000
	100 %	-10	3460 020 002	1.7	0.000 000	0.000
	100 %	0	3460 019 999	-1.1	0.000 000	0.000
	100 %	+10	3460 019 999	-1.2	0.000 000	0.000
	100 %	+30	3460 020 001	0.8	0.000 000	0.000
	100 %	+40	3460 020 001	1.5	0.000 000	0.000
	100 %	+50	3460 019 998	-1.8	0.000 000	-0.001
	Lowest voltage	+20	3460 019 999	-0.4	0.000 000	0.000
3540.000	100 %	+20(Ref)	3539 999 997	0.0	0.000 000	0.000
	100 %	-30	3539 999 993	-3.9	0.000 000	-0.001
	100 %	-20	3539 999 993	-3.9	0.000 000	-0.001
	100 %	-10	3539 999 992	-4.8	0.000 000	-0.001
	100 %	0	3539 999 992	-5.5	0.000 000	-0.002
	100 %	+10	3539 999 993	-3.7	0.000 000	-0.001
	100 %	+30	3539 999 994	-3.5	0.000 000	-0.001
	100 %	+40	3539 999 992	-5.2	0.000 000	-0.001
	100 %	+50	3539 999 994	-3.4	0.000 000	-0.001
	Lowest voltage	+20	3539 999 992	-5.2	0.000 000	-0.001

- ▣ BandWidth: 25 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3462.510	100 %	+20(Ref)	3462 510 000	0.0	0.000 000	0.000
	100 %	-30	3462 509 998	-2.1	0.000 000	-0.001
	100 %	-20	3462 509 998	-2.1	0.000 000	-0.001
	100 %	-10	3462 509 998	-2.9	0.000 000	-0.001
	100 %	0	3462 509 997	-3.8	0.000 000	-0.001
	100 %	+10	3462 509 998	-2.7	0.000 000	-0.001
	100 %	+30	3462 509 998	-2.4	0.000 000	-0.001
	100 %	+40	3462 510 001	0.1	0.000 000	0.000
	100 %	+50	3462 510 000	-0.5	0.000 000	0.000
	Lowest voltage	+20	3462 509 998	-2.5	0.000 000	-0.001
3537.480	100 %	+20(Ref)	3537 479 997	0.0	0.000 000	0.000
	100 %	-30	3537 479 993	-4.5	0.000 000	-0.001
	100 %	-20	3537 479 994	-3.1	0.000 000	-0.001
	100 %	-10	3537 479 995	-1.9	0.000 000	-0.001
	100 %	0	3537 479 992	-4.7	0.000 000	-0.001
	100 %	+10	3537 479 992	-5.5	0.000 000	-0.002
	100 %	+30	3537 479 989	-8.5	0.000 000	-0.002
	100 %	+40	3537 479 994	-3.4	0.000 000	-0.001
	100 %	+50	3537 479 996	-0.8	0.000 000	0.000
	Lowest voltage	+20	3537 479 991	-5.6	0.000 000	-0.002

- BandWidth: 30 MHz
- Voltage(100 %): 4.200 VDC
- Lowest voltage: 3.700 VDC
- LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3465.000	100 %	+20(Ref)	3464 999 997	0.0	0.000 000	0.000
	100 %	-30	3464 999 992	-4.5	0.000 000	-0.001
	100 %	-20	3464 999 993	-3.5	0.000 000	-0.001
	100 %	-10	3464 999 994	-3.2	0.000 000	-0.001
	100 %	0	3464 999 993	-4.1	0.000 000	-0.001
	100 %	+10	3464 999 995	-1.4	0.000 000	0.000
	100 %	+30	3464 999 995	-2.1	0.000 000	-0.001
	100 %	+40	3464 999 993	-4.2	0.000 000	-0.001
	100 %	+50	3464 999 993	-3.8	0.000 000	-0.001
	Lowest voltage	+20	3464 999 994	-3.0	0.000 000	-0.001
3534.990	100 %	+20(Ref)	3534 989 998	0.0	0.000 000	0.000
	100 %	-30	3534 989 994	-4.5	0.000 000	-0.001
	100 %	-20	3534 989 995	-3.2	0.000 000	-0.001
	100 %	-10	3534 989 998	-0.2	0.000 000	0.000
	100 %	0	3534 989 998	-0.5	0.000 000	0.000
	100 %	+10	3534 989 997	-2.0	0.000 000	-0.001
	100 %	+30	3534 989 996	-2.6	0.000 000	-0.001
	100 %	+40	3534 989 997	-1.6	0.000 000	0.000
	100 %	+50	3534 989 998	-0.5	0.000 000	0.000
	Lowest voltage	+20	3534 989 997	-1.0	0.000 000	0.000

- ▣ BandWidth: 40 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3470.010	100 %	+20(Ref)	3470 009 996	0.0	0.000 000	0.000
	100 %	-30	3470 009 993	-2.4	0.000 000	-0.001
	100 %	-20	3470 009 994	-2.1	0.000 000	-0.001
	100 %	-10	3470 009 992	-4.2	0.000 000	-0.001
	100 %	0	3470 009 994	-2.2	0.000 000	-0.001
	100 %	+10	3470 009 991	-4.9	0.000 000	-0.001
	100 %	+30	3470 009 994	-1.5	0.000 000	0.000
	100 %	+40	3470 009 994	-2.1	0.000 000	-0.001
	100 %	+50	3470 009 992	-3.3	0.000 000	-0.001
	Lowest voltage	+20	3470 009 993	-2.9	0.000 000	-0.001
3529.980	100 %	+20(Ref)	3529 979 995	0.0	0.000 000	0.000
	100 %	-30	3529 979 992	-3.6	0.000 000	-0.001
	100 %	-20	3529 979 992	-3.0	0.000 000	-0.001
	100 %	-10	3529 979 994	-1.4	0.000 000	0.000
	100 %	0	3529 979 991	-4.9	0.000 000	-0.001
	100 %	+10	3529 979 992	-3.3	0.000 000	-0.001
	100 %	+30	3529 979 994	-1.6	0.000 000	0.000
	100 %	+40	3529 979 992	-4.0	0.000 000	-0.001
	100 %	+50	3529 979 992	-3.5	0.000 000	-0.001
	Lowest voltage	+20	3529 979 992	-3.9	0.000 000	-0.001

- ▣ BandWidth: 50 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3475.020	100 %	+20(Ref)	3475 019 998	0.0	0.000 000	0.000
	100 %	-30	3475 019 992	-5.7	0.000 000	-0.002
	100 %	-20	3475 019 992	-5.4	0.000 000	-0.002
	100 %	-10	3475 019 991	-6.2	0.000 000	-0.002
	100 %	0	3475 019 992	-5.1	0.000 000	-0.001
	100 %	+10	3475 019 994	-3.9	0.000 000	-0.001
	100 %	+30	3475 019 995	-2.8	0.000 000	-0.001
	100 %	+40	3475 019 995	-2.8	0.000 000	-0.001
	100 %	+50	3475 019 993	-4.3	0.000 000	-0.001
	Lowest voltage	+20	3475 019 990	-7.0	0.000 000	-0.002
3525.000	100 %	+20(Ref)	3524 999 999	0.0	0.000 000	0.000
	100 %	-30	3524 999 997	-2.2	0.000 000	-0.001
	100 %	-20	3524 999 996	-2.6	0.000 000	-0.001
	100 %	-10	3524 999 998	-1.2	0.000 000	0.000
	100 %	0	3524 999 998	-1.5	0.000 000	0.000
	100 %	+10	3524 999 994	-5.1	0.000 000	-0.001
	100 %	+30	3524 999 998	-0.8	0.000 000	0.000
	100 %	+40	3524 999 996	-2.8	0.000 000	-0.001
	100 %	+50	3524 999 994	-4.7	0.000 000	-0.001
	Lowest voltage	+20	3524 999 993	-5.6	0.000 000	-0.002

- ▣ BandWidth: 60 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3480.000	100 %	+20(Ref)	3479 999 997	0.0	0.000 000	0.000
	100 %	-30	3479 999 994	-2.7	0.000 000	-0.001
	100 %	-20	3479 999 996	-1.0	0.000 000	0.000
	100 %	-10	3479 999 995	-1.7	0.000 000	0.000
	100 %	0	3479 999 995	-2.1	0.000 000	-0.001
	100 %	+10	3479 999 995	-1.3	0.000 000	0.000
	100 %	+30	3479 999 996	-0.5	0.000 000	0.000
	100 %	+40	3479 999 995	-1.7	0.000 000	0.000
	100 %	+50	3479 999 993	-3.2	0.000 000	-0.001
	Lowest voltage	+20	3479 999 993	-3.2	0.000 000	-0.001
3519.990	100 %	+20(Ref)	3519 989 997	0.0	0.000 000	0.000
	100 %	-30	3519 989 990	-6.4	0.000 000	-0.002
	100 %	-20	3519 989 990	-6.7	0.000 000	-0.002
	100 %	-10	3519 989 992	-4.7	0.000 000	-0.001
	100 %	0	3519 989 991	-5.7	0.000 000	-0.002
	100 %	+10	3519 989 991	-6.0	0.000 000	-0.002
	100 %	+30	3519 989 992	-4.8	0.000 000	-0.001
	100 %	+40	3519 989 991	-5.9	0.000 000	-0.002
	100 %	+50	3519 989 992	-4.5	0.000 000	-0.001
	Lowest voltage	+20	3519 989 990	-7.0	0.000 000	-0.002

- ▣ BandWidth: 70 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3485.010	100 %	+20(Ref)	3485 009 997	0.0	0.000 000	0.000
	100 %	-30	3485 009 990	-6.7	0.000 000	-0.002
	100 %	-20	3485 009 993	-3.7	0.000 000	-0.001
	100 %	-10	3485 009 991	-5.3	0.000 000	-0.002
	100 %	0	3485 009 993	-3.6	0.000 000	-0.001
	100 %	+10	3485 009 990	-6.2	0.000 000	-0.002
	100 %	+30	3485 009 991	-5.9	0.000 000	-0.002
	100 %	+40	3485 009 991	-5.8	0.000 000	-0.002
	100 %	+50	3485 009 988	-8.5	0.000 000	-0.002
	Lowest voltage	+20	3485 009 993	-4.1	0.000 000	-0.001
3514.980	100 %	+20(Ref)	3514 979 998	0.0	0.000 000	0.000
	100 %	-30	3514 979 995	-2.1	0.000 000	-0.001
	100 %	-20	3514 979 994	-3.4	0.000 000	-0.001
	100 %	-10	3514 979 996	-1.2	0.000 000	0.000
	100 %	0	3514 979 997	-1.0	0.000 000	0.000
	100 %	+10	3514 979 995	-2.8	0.000 000	-0.001
	100 %	+30	3514 979 994	-3.5	0.000 000	-0.001
	100 %	+40	3514 979 995	-2.3	0.000 000	-0.001
	100 %	+50	3514 979 995	-2.7	0.000 000	-0.001
	Lowest voltage	+20	3514 979 995	-2.7	0.000 000	-0.001

- ▣ BandWidth: 80 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3490.020	100 %	+20(Ref)	3490 019 996	0.0	0.000 000	0.000
	100 %	-30	3490 019 991	-5.0	0.000 000	-0.001
	100 %	-20	3490 019 990	-6.6	0.000 000	-0.002
	100 %	-10	3490 019 992	-4.2	0.000 000	-0.001
	100 %	0	3490 019 992	-3.8	0.000 000	-0.001
	100 %	+10	3490 019 992	-4.3	0.000 000	-0.001
	100 %	+30	3490 019 993	-3.2	0.000 000	-0.001
	100 %	+40	3490 019 991	-5.2	0.000 000	-0.001
	100 %	+50	3490 019 995	-0.8	0.000 000	0.000
	Lowest voltage	+20	3490 019 993	-3.7	0.000 000	-0.001
3510.000	100 %	+20(Ref)	3509 999 997	0.0	0.000 000	0.000
	100 %	-30	3509 999 993	-4.1	0.000 000	-0.001
	100 %	-20	3509 999 996	-1.0	0.000 000	0.000
	100 %	-10	3509 999 996	-1.0	0.000 000	0.000
	100 %	0	3509 999 995	-1.7	0.000 000	0.000
	100 %	+10	3509 999 995	-2.3	0.000 000	-0.001
	100 %	+30	3509 999 997	-0.4	0.000 000	0.000
	100 %	+40	3509 999 996	-0.7	0.000 000	0.000
	100 %	+50	3509 999 995	-2.2	0.000 000	-0.001
	Lowest voltage	+20	3509 999 995	-2.4	0.000 000	-0.001

- ▣ BandWidth: 90 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3495.000	100 %	+20(Ref)	3494 999 996	0.0	0.000 000	0.000
	100 %	-30	3494 999 993	-3.2	0.000 000	-0.001
	100 %	-20	3494 999 992	-3.8	0.000 000	-0.001
	100 %	-10	3494 999 993	-2.5	0.000 000	-0.001
	100 %	0	3494 999 994	-1.9	0.000 000	-0.001
	100 %	+10	3494 999 994	-1.9	0.000 000	-0.001
	100 %	+30	3494 999 993	-2.6	0.000 000	-0.001
	100 %	+40	3494 999 991	-4.8	0.000 000	-0.001
	100 %	+50	3494 999 991	-5.0	0.000 000	-0.001
	Lowest voltage	+20	3494 999 993	-3.3	0.000 000	-0.001
3504.990	100 %	+20(Ref)	3504 989 997	0.0	0.000 000	0.000
	100 %	-30	3504 989 996	-1.1	0.000 000	0.000
	100 %	-20	3504 989 996	-0.8	0.000 000	0.000
	100 %	-10	3504 989 995	-2.3	0.000 000	-0.001
	100 %	0	3504 989 995	-2.0	0.000 000	-0.001
	100 %	+10	3504 989 997	-0.2	0.000 000	0.000
	100 %	+30	3504 989 998	0.4	0.000 000	0.000
	100 %	+40	3504 989 996	-1.5	0.000 000	0.000
	100 %	+50	3504 989 995	-2.2	0.000 000	-0.001
	Lowest voltage	+20	3504 989 993	-4.1	0.000 000	-0.001

- ▣ BandWidth: 100 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3500.010	100 %	+20(Ref)	3500 009 997	0.0	0.000 000	0.000
	100 %	-30	3500 009 995	-2.2	0.000 000	-0.001
	100 %	-20	3500 009 995	-2.8	0.000 000	-0.001
	100 %	-10	3500 009 995	-2.7	0.000 000	-0.001
	100 %	0	3500 009 993	-4.4	0.000 000	-0.001
	100 %	+10	3500 009 996	-1.6	0.000 000	0.000
	100 %	+30	3500 009 994	-3.5	0.000 000	-0.001
	100 %	+40	3500 009 991	-6.6	0.000 000	-0.002
	100 %	+50	3500 009 995	-2.6	0.000 000	-0.001
	Lowest voltage	+20	3500 009 993	-4.7	0.000 000	-0.001

11. TEST DATA (MIMO2, 3700 MHz - 3980 MHz)

11.1 EQUIVALENT ISOTROPIC RADIATED POWER

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3705.00	Sub6 n77(78)/ 10 MHz [30 kHz]	PI/2 BPSK	-26.91	14.45	11.82	3.08	V	< 1.00	0.208	23.19	1	22
		QPSK	-26.97	14.39	11.82	3.08	V		0.206	23.13		
		16-QAM	-26.92	14.44	11.82	3.08	V		0.208	23.18		
		64-QAM	-27.28	14.08	11.82	3.08	V		0.191	22.82		
		256-QAM	-29.24	12.12	11.82	3.08	V		0.122	20.86		
3840.00		PI/2 BPSK	-30.42	12.58	11.25	3.20	V		0.116	20.63	1	1
		QPSK	-30.59	12.41	11.25	3.20	V		0.111	20.46		
		16-QAM	-30.46	12.54	11.25	3.20	V		0.115	20.59		
		64-QAM	-30.57	12.43	11.25	3.20	V		0.112	20.48		
		256-QAM	-32.48	10.52	11.25	3.20	V		0.072	18.57		
3975.00		PI/2 BPSK	-30.95	12.28	11.30	3.25	V		0.108	20.33	1	1
		QPSK	-31.10	12.13	11.30	3.25	V		0.104	20.18		
		16-QAM	-31.37	11.86	11.30	3.25	V		0.098	19.91		
		64-QAM	-31.42	11.81	11.30	3.25	V		0.097	19.86		
		256-QAM	-33.68	9.55	11.30	3.25	V		0.058	17.60		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3707.51	Sub6 n77(78)/ 15 MHz [30 kHz]	PI/2 BPSK	-25.67	15.72	11.80	3.08	V	< 1.00	0.278	24.44	1	36
		QPSK	-25.74	15.65	11.80	3.08	V		0.274	24.37		
		16-QAM	-25.92	15.47	11.80	3.08	V		0.262	24.19		
		64-QAM	-26.15	15.24	11.80	3.08	V		0.249	23.96		
		256-QAM	-27.98	13.41	11.80	3.08	V		0.163	22.13		
3840.00		PI/2 BPSK	-30.06	12.94	11.25	3.20	V		0.126	20.99	1	1
		QPSK	-30.22	12.78	11.25	3.20	V		0.121	20.83		
		16-QAM	-30.27	12.73	11.25	3.20	V		0.120	20.78		
		64-QAM	-30.14	12.86	11.25	3.20	V		0.123	20.91		
		256-QAM	-32.69	10.31	11.25	3.20	V		0.069	18.36		
3972.48		PI/2 BPSK	-30.84	12.41	11.28	3.25	V		0.111	20.44	1	36
		QPSK	-31.23	12.02	11.28	3.25	V		0.101	20.05		
		16-QAM	-30.98	12.27	11.28	3.25	V		0.107	20.30		
		64-QAM	-31.20	12.05	11.28	3.25	V		0.102	20.08		
		256-QAM	-33.17	10.08	11.28	3.25	V		0.065	18.11		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3710.01	Sub6 n77(78)/ 20 MHz [30 kHz]	PI/2 BPSK	-25.56	15.83	11.80	3.08	V	< 1.00	0.285	24.55	1	49
		QPSK	-25.66	15.73	11.80	3.08	V		0.279	24.45		
		16-QAM	-25.83	15.56	11.80	3.08	V		0.268	24.28		
		64-QAM	-25.91	15.48	11.80	3.08	V		0.263	24.20		
		256-QAM	-28.14	13.25	11.80	3.08	V		0.157	21.97		
3840.00		PI/2 BPSK	-29.82	13.18	11.25	3.20	V		0.133	21.23	1	1
		QPSK	-30.03	12.97	11.25	3.20	V		0.126	21.02		
		16-QAM	-30.06	12.94	11.25	3.20	V		0.126	20.99		
		64-QAM	-30.00	13.00	11.25	3.20	V		0.127	21.05		
		256-QAM	-32.56	10.44	11.25	3.20	V		0.071	18.49		
3969.99		PI/2 BPSK	-30.79	12.46	11.28	3.25	V		0.112	20.49	1	49
		QPSK	-30.81	12.44	11.28	3.25	V		0.111	20.47		
		16-QAM	-31.11	12.14	11.28	3.25	V		0.104	20.17		
		64-QAM	-30.87	12.38	11.28	3.25	V		0.110	20.41		
		256-QAM	-33.13	10.12	11.28	3.25	V		0.065	18.15		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3712.50	Sub6 n77(78)/ 25 MHz [30 kHz]	PI/2 BPSK	-25.67	15.73	11.78	3.11	V	< 1.00	0.275	24.40	1	32
		QPSK	-25.98	15.42	11.78	3.11	V		0.256	24.09		
		16-QAM	-25.96	15.44	11.78	3.11	V		0.258	24.11		
		64-QAM	-26.51	14.89	11.78	3.11	V		0.227	23.56		
		256-QAM	-28.41	12.99	11.78	3.11	V		0.147	21.66		
3840.00		PI/2 BPSK	-29.36	13.64	11.25	3.20	V		0.148	21.69	1	1
		QPSK	-29.53	13.47	11.25	3.20	V		0.142	21.52		
		16-QAM	-29.55	13.45	11.25	3.20	V		0.141	21.50		
		64-QAM	-30.01	12.99	11.25	3.20	V		0.127	21.04		
		256-QAM	-32.18	10.82	11.25	3.20	V		0.077	18.87		
3967.50		PI/2 BPSK	-30.46	12.79	11.28	3.25	V		0.121	20.82	1	63
		QPSK	-30.68	12.57	11.28	3.25	V		0.115	20.60		
		16-QAM	-30.57	12.68	11.28	3.25	V		0.118	20.71		
		64-QAM	-31.09	12.16	11.28	3.25	V		0.104	20.19		
		256-QAM	-33.68	9.57	11.28	3.25	V		0.058	17.60		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3715.02	Sub6 n77(78)/ 30 MHz [30 kHz]	PI/2 BPSK	-25.57	15.83	11.78	3.11	V	< 1.00	0.282	24.50	1	39
		QPSK	-25.60	15.80	11.78	3.11	V		0.280	24.47		
		16-QAM	-25.85	15.55	11.78	3.11	V		0.264	24.22		
		64-QAM	-26.36	15.04	11.78	3.11	V		0.235	23.71		
		256-QAM	-28.50	12.90	11.78	3.11	V		0.144	21.57		
3840.00		PI/2 BPSK	-29.33	13.67	11.25	3.20	V		0.149	21.72	1	1
		QPSK	-29.57	13.43	11.25	3.20	V		0.141	21.48		
		16-QAM	-29.45	13.55	11.25	3.20	V		0.145	21.60		
		64-QAM	-30.12	12.88	11.25	3.20	V		0.124	20.93		
		256-QAM	-32.21	10.79	11.25	3.20	V		0.077	18.84		
3964.98		PI/2 BPSK	-30.75	12.51	11.27	3.24	V		0.113	20.54	1	39
		QPSK	-30.77	12.49	11.27	3.24	V		0.113	20.52		
		16-QAM	-30.81	12.45	11.27	3.24	V		0.112	20.48		
		64-QAM	-31.13	12.13	11.27	3.24	V		0.104	20.16		
		256-QAM	-33.67	9.59	11.27	3.24	V		0.058	17.62		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3720.00	Sub6 n77(78)/ 40 MHz [30 kHz]	PI/2 BPSK	-25.58	15.82	11.77	3.13	V	< 1.00	0.279	24.46	1	53
		QPSK	-25.75	15.65	11.77	3.13	V		0.269	24.29		
		16-QAM	-25.96	15.44	11.77	3.13	V		0.256	24.08		
		64-QAM	-26.59	14.81	11.77	3.13	V		0.221	23.45		
		256-QAM	-28.84	12.56	11.77	3.13	V		0.132	21.20		
3840.00		PI/2 BPSK	-29.02	13.98	11.25	3.20	V		0.160	22.03	1	1
		QPSK	-29.22	13.78	11.25	3.20	V		0.152	21.83		
		16-QAM	-29.19	13.81	11.25	3.20	V		0.153	21.86		
		64-QAM	-29.80	13.20	11.25	3.20	V		0.133	21.25		
		256-QAM	-31.99	11.01	11.25	3.20	V		0.081	19.06		
3960.00		PI/2 BPSK	-30.53	12.77	11.25	3.24	V		0.120	20.78	1	104
		QPSK	-30.81	12.49	11.25	3.24	V		0.112	20.50		
		16-QAM	-34.70	8.60	11.25	3.24	V		0.046	16.61		
		64-QAM	-30.98	12.32	11.25	3.24	V		0.108	20.33		
		256-QAM	-33.20	10.10	11.25	3.24	V		0.065	18.11		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3725.10	Sub6 n77(78)/ 50 MHz [30 kHz]	PI/2 BPSK	-26.40	15.05	11.75	3.15	V	< 1.00	0.232	23.65	1	66
		QPSK	-26.84	14.61	11.75	3.15	V		0.209	23.21		
		16-QAM	-26.47	14.98	11.75	3.15	V		0.228	23.58		
		64-QAM	-27.01	14.44	11.75	3.15	V		0.201	23.04		
		256-QAM	-29.19	12.26	11.75	3.15	V		0.122	20.86		
3840.00		PI/2 BPSK	-29.22	13.78	11.25	3.20	V		0.152	21.83	1	1
		QPSK	-29.37	13.63	11.25	3.20	V		0.147	21.68		
		16-QAM	-29.38	13.62	11.25	3.20	V		0.147	21.67		
		64-QAM	-29.48	13.52	11.25	3.20	V		0.144	21.57		
		256-QAM	-32.12	10.88	11.25	3.20	V		0.078	18.93		
3954.99		PI/2 BPSK	-30.72	12.58	11.24	3.23	V		0.115	20.59	1	131
		QPSK	-30.74	12.56	11.24	3.23	V		0.114	20.57		
		16-QAM	-30.99	12.31	11.24	3.23	V		0.108	20.32		
		64-QAM	-30.92	12.38	11.24	3.23	V		0.109	20.39		
		256-QAM	-33.10	10.20	11.24	3.23	V		0.066	18.21		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3730.02	Sub6 n77(78)/ 60 MHz [30 kHz]	PI/2 BPSK	-27.24	14.26	11.73	3.17	V	< 1.00	0.191	22.82	1	82
		QPSK	-27.40	14.10	11.73	3.17	V		0.185	22.66		
		16-QAM	-27.71	13.79	11.73	3.17	V		0.172	22.35		
		64-QAM	-27.79	13.71	11.73	3.17	V		0.169	22.27		
		256-QAM	-30.23	11.27	11.73	3.17	V		0.096	19.83		
3840.00		PI/2 BPSK	-29.07	13.93	11.25	3.20	V		0.158	21.98	1	1
		QPSK	-29.25	13.75	11.25	3.20	V		0.151	21.80		
		16-QAM	-29.09	13.91	11.25	3.20	V		0.157	21.96		
		64-QAM	-29.68	13.32	11.25	3.20	V		0.137	21.37		
		256-QAM	-31.63	11.37	11.25	3.20	V		0.087	19.42		
3949.98		PI/2 BPSK	-30.52	12.78	11.23	3.22	V		0.120	20.79	1	160
		QPSK	-30.56	12.74	11.23	3.22	V		0.119	20.75		
		16-QAM	-30.82	12.48	11.23	3.22	V		0.112	20.49		
		64-QAM	-31.06	12.24	11.23	3.22	V		0.106	20.25		
		256-QAM	-33.54	9.76	11.23	3.22	V		0.060	17.77		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3735.00	Sub6 n77(78)/ 70 MHz [30 kHz]	PI/2 BPSK	-27.54	14.01	11.72	3.18	V	< 1.00	0.180	22.55	1	94
		QPSK	-27.66	13.89	11.72	3.18	V		0.175	22.43		
		16-QAM	-27.61	13.94	11.72	3.18	V		0.177	22.48		
		64-QAM	-27.97	13.58	11.72	3.18	V		0.163	22.12		
		256-QAM	-30.56	10.99	11.72	3.18	V		0.090	19.53		
3840.00		PI/2 BPSK	-28.75	14.25	11.25	3.20	V		0.170	22.30	1	1
		QPSK	-28.91	14.09	11.25	3.20	V		0.164	22.14		
		16-QAM	-28.92	14.08	11.25	3.20	V		0.163	22.13		
		64-QAM	-29.26	13.74	11.25	3.20	V		0.151	21.79		
		256-QAM	-31.78	11.22	11.25	3.20	V		0.085	19.27		
3945.00		PI/2 BPSK	-30.54	12.80	11.21	3.23	V		0.120	20.78	1	187
		QPSK	-30.63	12.71	11.21	3.23	V		0.117	20.69		
		16-QAM	-30.75	12.59	11.21	3.23	V		0.114	20.57		
		64-QAM	-31.13	12.21	11.21	3.23	V		0.104	20.19		
		256-QAM	-33.38	9.96	11.21	3.23	V		0.062	17.94		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3740.01	Sub6 n77(78)/ 80 MHz [30 kHz]	PI/2 BPSK	-27.83	13.77	11.70	3.19	V	< 1.00	0.169	22.28	1	108
		QPSK	-27.94	13.66	11.70	3.19	V		0.165	22.17		
		16-QAM	-30.44	11.16	11.70	3.19	V		0.093	19.67		
		64-QAM	-28.61	12.99	11.70	3.19	V		0.141	21.50		
		256-QAM	-30.71	10.89	11.70	3.19	V		0.087	19.40		
3840.00		PI/2 BPSK	-28.28	14.72	11.25	3.20	V		0.189	22.77	1	1
		QPSK	-28.70	14.30	11.25	3.20	V		0.172	22.35		
		16-QAM	-28.96	14.04	11.25	3.20	V		0.162	22.09		
		64-QAM	-29.57	13.43	11.25	3.20	V		0.141	21.48		
		256-QAM	-31.28	11.72	11.25	3.20	V		0.095	19.77		
3939.99		PI/2 BPSK	-30.55	12.81	11.20	3.23	V		0.120	20.78	1	215
		QPSK	-30.72	12.64	11.20	3.23	V		0.115	20.61		
		16-QAM	-30.65	12.71	11.20	3.23	V		0.117	20.68		
		64-QAM	-31.15	12.21	11.20	3.23	V		0.104	20.18		
		256-QAM	-33.93	9.43	11.20	3.23	V		0.055	17.40		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3745.02	Sub6 n77(78)/ 90 MHz [30 kHz]	PI/2 BPSK	-28.15	13.48	11.69	3.18	V	< 1.00	0.158	21.99	1	122
		QPSK	-28.23	13.40	11.69	3.18	V		0.155	21.91		
		16-QAM	-30.76	10.87	11.69	3.18	V		0.087	19.38		
		64-QAM	-28.42	13.21	11.69	3.18	V		0.149	21.72		
		256-QAM	-30.45	11.18	11.69	3.18	V		0.093	19.69		
3840.00		PI/2 BPSK	-28.31	14.69	11.25	3.20	V		0.188	22.74	1	1
		QPSK	-28.42	14.58	11.25	3.20	V		0.183	22.63		
		16-QAM	-28.52	14.48	11.25	3.20	V		0.179	22.53		
		64-QAM	-29.24	13.76	11.25	3.20	V		0.152	21.81		
		256-QAM	-30.94	12.06	11.25	3.20	V		0.103	20.11		
3934.98	PI/2 BPSK	-30.70	12.68	11.18	3.24	V	0.115	20.62	1	243		
	QPSK	-30.84	12.54	11.18	3.24	V	0.112	20.48				
	16-QAM	-30.86	12.52	11.18	3.24	V	0.111	20.46				
	64-QAM	-31.08	12.30	11.18	3.24	V	0.106	20.24				
	256-QAM	-33.87	9.51	11.18	3.24	V	0.056	17.45				

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
3750.00	Sub6 n77(78)/ 100 MHz [30 kHz]	PI/2 BPSK	-28.18	13.49	11.67	3.17	V	< 1.00	0.158	21.99	1	136
		QPSK	-28.30	13.37	11.67	3.17	V		0.154	21.87		
		16-QAM	-32.08	9.59	11.67	3.17	V		0.064	18.09		
		64-QAM	-28.80	12.87	11.67	3.17	V		0.137	21.37		
		256-QAM	-31.14	10.53	11.67	3.17	V		0.080	19.03		
3840.00		PI/2 BPSK	-28.30	14.70	11.25	3.20	V		0.188	22.75	1	1
		QPSK	-28.35	14.65	11.25	3.20	V		0.186	22.70		
		16-QAM	-28.69	14.31	11.25	3.20	V		0.172	22.36		
		64-QAM	-29.52	13.48	11.25	3.20	V		0.142	21.53		
		256-QAM	-31.08	11.92	11.25	3.20	V		0.099	19.97		
3930.00		PI/2 BPSK	-30.66	12.75	11.17	3.26	V		0.116	20.66	1	271
		QPSK	-30.95	12.46	11.17	3.26	V		0.109	20.37		
		16-QAM	-30.93	12.48	11.17	3.26	V		0.109	20.39		
		64-QAM	-31.49	11.92	11.17	3.26	V		0.096	19.83		
		256-QAM	-33.48	9.93	11.17	3.26	V		0.061	17.84		

11.2 RADIATED SPURIOUS EMISSIONS

■ NR Band:	<u>N77(78)</u>
■ Bandwidth:	<u>20 MHz</u>
■ Modulation:	<u>PI/2 BPSK</u>
■ Distance:	<u>1 meters</u>
■ SCS:	<u>30 kHz</u>

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
647334 (3710.01)	7 420.02	-42.23	11.24	-44.81	4.55	V	-38.12	-13.00	1	49
	11 130.03	-53.97	12.31	-54.56	5.80	H	-48.05	-13.00		
	14 840.04	-61.64	13.77	-44.02	6.74	V	-36.99	-13.00		
656000 (3840.00)	7 680.00	-34.16	11.60	-36.62	4.70	V	-29.72	-13.00	1	1
	11 520.00	-53.31	12.51	-52.93	5.87	V	-46.29	-13.00		
	15 360.00	-62.57	15.21	-42.95	6.88	V	-34.62	-13.00		
664666 (3969.99)	7 939.98	-46.35	11.15	-47.57	4.78	V	-41.20	-13.00	1	49
	11 909.97	-54.32	12.97	-52.55	5.96	V	-45.54	-13.00		
	15 879.96	-61.39	16.06	-43.17	6.98	V	-34.09	-13.00		

11.3 PEAK-TO-AVERAGE RATIO

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (dB)	Limit (dB)
Sub6 n77(78)	10 MHz	3840.00	BPSK	Full RB	0	4.73	13.00
			QPSK			5.75	
			16-QAM			6.64	
			64-QAM			6.88	
			256-QAM			6.52	
	15 MHz		BPSK			4.65	
			QPSK			5.91	
			16-QAM			6.60	
			64-QAM			6.61	
			256-QAM			6.97	
	20 MHz		BPSK			4.62	
			QPSK			5.84	
			16-QAM			6.66	
			64-QAM			6.73	
			256-QAM			6.84	
	25 MHz		BPSK			5.39	
			QPSK			5.90	
			16-QAM			6.63	
			64-QAM			6.72	
			256-QAM			6.90	
	30 MHz		BPSK			4.58	
			QPSK			5.75	
			16-QAM			6.61	
			64-QAM			6.79	
			256-QAM			6.71	
	40 MHz		BPSK			4.41	
			QPSK			5.70	
			16-QAM			6.52	
			64-QAM			4.59	
			256-QAM			6.74	
	50 MHz		BPSK			4.59	
			QPSK			5.80	
			16-QAM			6.60	
			64-QAM			6.71	
			256-QAM			6.80	

	60 MHz	BPSK			4.56	
		QPSK			5.77	
		16-QAM			6.59	
		64-QAM			6.65	
		256-QAM			6.79	
	70 MHz	BPSK			4.85	
		QPSK			5.83	
		16-QAM			6.55	
		64-QAM			6.65	
		256-QAM			6.73	
	80 MHz	BPSK			5.11	
		QPSK			5.80	
		16-QAM			6.48	
		64-QAM			6.68	
		256-QAM			6.72	
	90 MHz	BPSK			4.92	
		QPSK			5.79	
		16-QAM			6.51	
		64-QAM			6.73	
		256-QAM			6.77	
	100 MHz	BPSK			4.88	
		QPSK			5.81	
		16-QAM			6.51	
		64-QAM			6.74	
		256-QAM			6.78	

Note:

1. Plots of the EUT's Peak- to- Average Ratio are shown Page 1159 ~ 1218.

11.4 OCCUPIED BANDWIDTH

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (MHz)
Sub6 n77(78)	10 MHz	3840.00	BPSK	Full RB	0	8.6213
			QPSK			8.6307
			16-QAM			8.6166
			64-QAM			8.6308
			256-QAM			8.6337
	15 MHz		BPSK			12.901
			QPSK			12.937
			16-QAM			12.888
			64-QAM			12.959
			256-QAM			12.881
	20 MHz		BPSK			17.953
			QPSK			17.911
			16-QAM			17.906
			64-QAM			17.895
			256-QAM			17.965
	25 MHz		BPSK			22.889
			QPSK			22.881
			16-QAM			22.935
			64-QAM			22.852
			256-QAM			22.898
	30 MHz		BPSK			26.818
			QPSK			26.903
			16-QAM			26.901
			64-QAM			26.846
			256-QAM			26.874
	40 MHz		BPSK			35.825
			QPSK			35.822
			16-QAM			35.823
			64-QAM			35.866
			256-QAM			35.810
	50 MHz		BPSK			45.894
			QPSK			45.848
			16-QAM			45.838
			64-QAM			45.868
			256-QAM			45.797

	60 MHz		BPSK			57.967
			QPSK			57.815
			16-QAM			57.851
			64-QAM			57.892
			256-QAM			57.933
	70 MHz		BPSK			64.453
			QPSK			64.507
			16-QAM			64.364
			64-QAM			64.427
			256-QAM			64.437
	80 MHz		BPSK			77.393
			QPSK			77.421
			16-QAM			77.132
			64-QAM			77.323
			256-QAM			77.145
	90 MHz		BPSK			86.973
			QPSK			86.998
			16-QAM			86.842
			64-QAM			86.834
			256-QAM			86.863
	100 MHz		BPSK			96.509
			QPSK			96.682
			16-QAM			96.412
			64-QAM			96.683
			256-QAM			96.422

Note:

1. Plots of the EUT's Occupied Bandwidth are shown Page 1219 ~ 1278.

11.5 CONDUCTED SPURIOUS EMISSIONS

Band	Band Width (MHz)	Frequency (MHz)	Frequency of Maximum Harmonic (GHz)	Factor (dB)	Measurement Maximum Data (dBm)	Result (dBm)	Limit (dBm)
Sub6 n77(78)	10	3705.000	4.95518	28.150	-61.87	-33.718	-13.00
		3840.000	9.74078	28.730	-62.06	-33.327	
		3975.000	4.94521	28.730	-62.29	-33.556	
	15	3707.520	8.88336	28.730	-62.13	-33.404	
		3840.000	5.21440	28.730	-62.34	-33.612	
		3972.480	5.47362	28.730	-60.78	-32.048	
	20	3710.010	5.20443	28.730	-61.60	-32.868	
		3840.000	8.67399	28.730	-61.98	-33.247	
		3969.990	4.90533	28.150	-61.77	-33.616	
	25	3712.500	5.21440	28.730	-59.88	-31.148	
		3840.000	9.83051	28.730	-61.52	-32.793	
		3967.500	9.19243	28.730	-61.84	-33.111	
	30	3715.020	9.91027	28.730	-61.90	-33.172	
		3840.000	8.95315	28.730	-61.94	-33.209	
		3964.980	4.87542	28.150	-61.64	-33.494	
	40	3720.000	8.91327	28.730	-62.37	-33.636	
		3840.000	9.42174	28.730	-62.17	-33.442	
		3960.000	6.05188	28.730	-61.99	-33.259	
	50	3725.010	9.91027	28.730	-62.58	-33.845	
		3840.000	4.90533	28.150	-60.86	-32.711	
		3954.990	4.92527	28.150	-61.59	-33.439	
	60	3730.020	7.19843	28.730	-61.07	-32.345	
		3840.000	6.01200	28.730	-62.36	-33.626	
		3949.980	5.98209	28.730	-61.83	-33.095	
	70	3735.000	8.88336	28.730	-61.56	-32.833	
		3840.000	5.44371	28.730	-62.66	-33.926	
		3945.000	5.75278	28.730	-62.97	-34.238	
	80	3740.010	9.80060	28.730	-61.28	-32.552	
		3840.000	9.98006	28.730	-62.23	-33.504	
		3939.990	4.91530	28.150	-62.27	-34.120	
	90	3745.020	6.02197	28.730	-62.45	-33.717	
		3840.000	4.92527	28.150	-61.40	-33.250	
		3934.980	4.99506	28.150	-62.48	-34.326	
	100	3750.000	4.89536	28.150	-61.54	-33.389	
		3840.000	4.91530	28.150	-62.01	-33.855	
		3930.000	5.48359	28.730	-62.29	-33.560	

Note:

1. Plots of the EUT's Conducted Spurious Emissions are shown Page 1279 ~ 1350.
2. Factor(dB) = Cable Loss + Ext. Attenuator + Power Splitter
3. Result(dBm) = Reading + Factor

Factor(dB)

Frequency Range (GHz)	Factor [dB]
0.03 – 1	27.270
1 – 5	28.150
5 – 10	28.730
10 – 15	29.330
15 – 20	30.520
Above 20	31.890

11.6 BAND EDGE

1. Plots of the EUT's Band Edge are shown Page 1351 ~ 1494.
2. Duty Cycle factor already applied on the factor.
 - Factor(dB) = Duty Cycle factor + Cable Loss + Ext. Attenuator + Power Splitter
 - Result(dBm) = Reading + Factor
 - Duty Cycle Factor(dB) = 6.990

11.7 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE

- ▣ BandWidth: 10 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3705.000	100 %	+20(Ref)	3704 999 995	0.0	0.000 000	0.000
	100 %	-30	3704 999 992	-3.6	0.000 000	-0.001
	100 %	-20	3704 999 991	-3.7	0.000 000	-0.001
	100 %	-10	3704 999 991	-4.6	0.000 000	-0.001
	100 %	0	3704 999 990	-5.2	0.000 000	-0.001
	100 %	+10	3704 999 991	-3.8	0.000 000	-0.001
	100 %	+30	3704 999 991	-4.6	0.000 000	-0.001
	100 %	+40	3704 999 990	-5.0	0.000 000	-0.001
	100 %	+50	3704 999 991	-3.8	0.000 000	-0.001
	Lowest voltage	+20	3704 999 988	-7.1	0.000 000	-0.002
3975.000	100 %	+20(Ref)	3974 999 998	0.0	0.000 000	0.000
	100 %	-30	3974 999 993	-4.7	0.000 000	-0.001
	100 %	-20	3974 999 992	-5.4	0.000 000	-0.001
	100 %	-10	3974 999 997	-1.3	0.000 000	0.000
	100 %	0	3974 999 993	-4.7	0.000 000	-0.001
	100 %	+10	3974 999 995	-3.2	0.000 000	-0.001
	100 %	+30	3974 999 995	-2.8	0.000 000	-0.001
	100 %	+40	3974 999 994	-3.7	0.000 000	-0.001
	100 %	+50	3974 999 993	-4.6	0.000 000	-0.001
	Lowest voltage	+20	3974 999 995	-3.2	0.000 000	-0.001

- ▣ BandWidth: 15 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3707.520	100 %	+20(Ref)	3707 519 994	0.0	0.000 000	0.000
	100 %	-30	3707 519 989	-4.7	0.000 000	-0.001
	100 %	-20	3707 519 991	-3.4	0.000 000	-0.001
	100 %	-10	3707 519 988	-6.0	0.000 000	-0.002
	100 %	0	3707 519 989	-4.9	0.000 000	-0.001
	100 %	+10	3707 519 987	-7.6	0.000 000	-0.002
	100 %	+30	3707 519 988	-6.3	0.000 000	-0.002
	100 %	+40	3707 519 989	-5.5	0.000 000	-0.001
	100 %	+50	3707 519 990	-4.0	0.000 000	-0.001
	Lowest voltage	+20	3707 519 989	-4.8	0.000 000	-0.001
3972.480	100 %	+20(Ref)	3972 479 997	0.0	0.000 000	0.000
	100 %	-30	3972 479 993	-3.6	0.000 000	-0.001
	100 %	-20	3972 479 994	-2.8	0.000 000	-0.001
	100 %	-10	3972 479 993	-3.6	0.000 000	-0.001
	100 %	0	3972 479 994	-2.7	0.000 000	-0.001
	100 %	+10	3972 479 996	-0.7	0.000 000	0.000
	100 %	+30	3972 479 995	-1.5	0.000 000	0.000
	100 %	+40	3972 479 994	-2.9	0.000 000	-0.001
	100 %	+50	3972 479 995	-1.4	0.000 000	0.000
	Lowest voltage	+20	3972 479 993	-3.4	0.000 000	-0.001

- ▣ BandWidth: 20 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3710.010	100 %	+20(Ref)	3710 009 998	0.0	0.000 000	0.000
	100 %	-30	3710 009 998	-0.2	0.000 000	0.000
	100 %	-20	3710 009 993	-5.3	0.000 000	-0.001
	100 %	-10	3710 009 996	-2.4	0.000 000	-0.001
	100 %	0	3710 009 991	-7.1	0.000 000	-0.002
	100 %	+10	3710 009 992	-6.1	0.000 000	-0.002
	100 %	+30	3710 009 991	-7.5	0.000 000	-0.002
	100 %	+40	3710 009 993	-5.4	0.000 000	-0.001
	100 %	+50	3710 009 995	-3.4	0.000 000	-0.001
	Lowest voltage	+20	3710 009 993	-5.5	0.000 000	-0.001
3969.990	100 %	+20(Ref)	3969 978 992	0.0	0.000 000	0.000
	100 %	-30	3969 978 992	-0.3	0.000 000	0.000
	100 %	-20	3969 978 987	-4.8	0.000 000	-0.001
	100 %	-10	3969 978 987	-5.2	0.000 000	-0.001
	100 %	0	3969 978 986	-6.1	0.000 000	-0.002
	100 %	+10	3969 978 988	-4.3	0.000 000	-0.001
	100 %	+30	3969 978 987	-5.6	0.000 000	-0.001
	100 %	+40	3969 978 985	-6.7	0.000 000	-0.002
	100 %	+50	3969 978 985	-7.2	0.000 000	-0.002
	Lowest voltage	+20	3969 978 985	-6.9	0.000 000	-0.002

- ▣ BandWidth: 25 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3712.500	100 %	+20(Ref)	3712 499 993	0.0	0.000 000	0.000
	100 %	-30	3712 499 988	-5.2	0.000 000	-0.001
	100 %	-20	3712 499 988	-5.7	0.000 000	-0.002
	100 %	-10	3712 499 988	-5.3	0.000 000	-0.001
	100 %	0	3712 499 987	-6.4	0.000 000	-0.002
	100 %	+10	3712 499 990	-3.7	0.000 000	-0.001
	100 %	+30	3712 499 990	-3.3	0.000 000	-0.001
	100 %	+40	3712 499 989	-4.0	0.000 000	-0.001
	100 %	+50	3712 499 989	-4.5	0.000 000	-0.001
	Lowest voltage	+20	3712 499 987	-6.5	0.000 000	-0.002
3967.500	100 %	+20(Ref)	3967 499 996	0.0	0.000 000	0.000
	100 %	-30	3967 499 993	-2.9	0.000 000	-0.001
	100 %	-20	3967 499 993	-2.5	0.000 000	-0.001
	100 %	-10	3967 499 992	-3.9	0.000 000	-0.001
	100 %	0	3967 499 993	-2.7	0.000 000	-0.001
	100 %	+10	3967 499 991	-4.4	0.000 000	-0.001
	100 %	+30	3967 499 992	-3.7	0.000 000	-0.001
	100 %	+40	3967 499 994	-1.6	0.000 000	0.000
	100 %	+50	3967 499 991	-5.2	0.000 000	-0.001
	Lowest voltage	+20	3967 499 992	-3.9	0.000 000	-0.001

- BandWidth: 30 MHz
- Voltage(100 %): 4.200 VDC
- Lowest voltage: 3.700 VDC
- LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3715.020	100 %	+20(Ref)	3715 019 996	0.0	0.000 000	0.000
	100 %	-30	3715 019 991	-4.2	0.000 000	-0.001
	100 %	-20	3715 019 991	-4.7	0.000 000	-0.001
	100 %	-10	3715 019 988	-8.1	0.000 000	-0.002
	100 %	0	3715 019 987	-8.6	0.000 000	-0.002
	100 %	+10	3715 019 992	-3.7	0.000 000	-0.001
	100 %	+30	3715 019 993	-2.4	0.000 000	-0.001
	100 %	+40	3715 019 988	-7.8	0.000 000	-0.002
	100 %	+50	3715 019 988	-7.2	0.000 000	-0.002
	Lowest voltage	+20	3715 019 988	-7.8	0.000 000	-0.002
3964.980	100 %	+20(Ref)	3964 979 999	0.0	0.000 000	0.000
	100 %	-30	3964 979 997	-2.1	0.000 000	-0.001
	100 %	-20	3964 979 999	-0.3	0.000 000	0.000
	100 %	-10	3964 979 999	0.3	0.000 000	0.000
	100 %	0	3964 979 995	-3.9	0.000 000	-0.001
	100 %	+10	3964 979 997	-2.2	0.000 000	-0.001
	100 %	+30	3964 979 997	-1.8	0.000 000	0.000
	100 %	+40	3964 979 998	-0.7	0.000 000	0.000
	100 %	+50	3964 979 995	-3.6	0.000 000	-0.001
	Lowest voltage	+20	3964 979 997	-2.1	0.000 000	-0.001

- ▣ BandWidth: 40 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3720.000	100 %	+20(Ref)	3719 999 992	0.0	0.000 000	0.000
	100 %	-30	3719 999 985	-7.6	0.000 000	-0.002
	100 %	-20	3719 999 986	-6.3	0.000 000	-0.002
	100 %	-10	3719 999 986	-6.6	0.000 000	-0.002
	100 %	0	3719 999 984	-8.1	0.000 000	-0.002
	100 %	+10	3719 999 988	-4.8	0.000 000	-0.001
	100 %	+30	3719 999 987	-4.9	0.000 000	-0.001
	100 %	+40	3719 999 987	-4.8	0.000 000	-0.001
	100 %	+50	3719 999 988	-4.2	0.000 000	-0.001
	Lowest voltage	+20	3719 999 987	-5.0	0.000 000	-0.001
3960.000	100 %	+20(Ref)	3959 999 997	0.0	0.000 000	0.000
	100 %	-30	3959 999 994	-3.4	0.000 000	-0.001
	100 %	-20	3959 999 995	-2.5	0.000 000	-0.001
	100 %	-10	3959 999 995	-1.7	0.000 000	0.000
	100 %	0	3959 999 992	-5.0	0.000 000	-0.001
	100 %	+10	3959 999 995	-2.5	0.000 000	-0.001
	100 %	+30	3959 999 994	-2.8	0.000 000	-0.001
	100 %	+40	3959 999 995	-2.0	0.000 000	-0.001
	100 %	+50	3959 999 992	-5.0	0.000 000	-0.001
	Lowest voltage	+20	3959 999 995	-2.4	0.000 000	-0.001

- ▣ BandWidth: 50 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3725.010	100 %	+20(Ref)	3724 009 992	0.0	0.000 000	0.000
	100 %	-30	3724 009 990	-2.4	0.000 000	-0.001
	100 %	-20	3724 009 990	-2.2	0.000 000	-0.001
	100 %	-10	3724 009 991	-1.8	0.000 000	0.000
	100 %	0	3724 009 991	-1.8	0.000 000	0.000
	100 %	+10	3724 009 989	-3.3	0.000 000	-0.001
	100 %	+30	3724 009 990	-2.5	0.000 000	-0.001
	100 %	+40	3724 009 987	-5.2	0.000 000	-0.001
	100 %	+50	3724 009 990	-2.7	0.000 000	-0.001
	Lowest voltage	+20	3724 009 983	-9.2	0.000 000	-0.002
3954.990	100 %	+20(Ref)	3954 989 998	0.0	0.000 000	0.000
	100 %	-30	3954 989 996	-2.0	0.000 000	0.000
	100 %	-20	3954 989 997	-1.1	0.000 000	0.000
	100 %	-10	3954 989 996	-2.1	0.000 000	-0.001
	100 %	0	3954 989 999	1.0	0.000 000	0.000
	100 %	+10	3954 989 997	-1.5	0.000 000	0.000
	100 %	+30	3954 989 999	0.6	0.000 000	0.000
	100 %	+40	3954 989 996	-2.0	0.000 000	-0.001
	100 %	+50	3954 989 997	-0.6	0.000 000	0.000
	Lowest voltage	+20	3954 989 999	1.2	0.000 000	0.000

- ▣ BandWidth: 60 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3730.020	100 %	+20(Ref)	3730 019 993	0.0	0.000 000	0.000
	100 %	-30	3730 019 986	-7.3	0.000 000	-0.002
	100 %	-20	3730 019 986	-6.8	0.000 000	-0.002
	100 %	-10	3730 019 986	-7.0	0.000 000	-0.002
	100 %	0	3730 019 984	-8.8	0.000 000	-0.002
	100 %	+10	3730 019 986	-6.8	0.000 000	-0.002
	100 %	+30	3730 019 988	-5.1	0.000 000	-0.001
	100 %	+40	3730 019 987	-6.3	0.000 000	-0.002
	100 %	+50	3730 019 985	-8.6	0.000 000	-0.002
	Lowest voltage	+20	3730 019 985	-8.4	0.000 000	-0.002
3949.980	100 %	+20(Ref)	3949 979 996	0.0	0.000 000	0.000
	100 %	-30	3949 979 994	-1.4	0.000 000	0.000
	100 %	-20	3949 979 990	-5.3	0.000 000	-0.001
	100 %	-10	3949 979 995	-0.5	0.000 000	0.000
	100 %	0	3949 979 996	0.1	0.000 000	0.000
	100 %	+10	3949 979 992	-3.7	0.000 000	-0.001
	100 %	+30	3949 979 992	-4.0	0.000 000	-0.001
	100 %	+40	3949 979 993	-3.1	0.000 000	-0.001
	100 %	+50	3949 979 991	-4.2	0.000 000	-0.001
	Lowest voltage	+20	3949 979 992	-3.3	0.000 000	-0.001

- ▣ BandWidth: 70 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3735.000	100 %	+20(Ref)	3734 999 992	0.0	0.000 000	0.000
	100 %	-30	3734 999 983	-8.8	0.000 000	-0.002
	100 %	-20	3734 999 983	-8.8	0.000 000	-0.002
	100 %	-10	3734 999 986	-6.4	0.000 000	-0.002
	100 %	0	3734 999 985	-6.8	0.000 000	-0.002
	100 %	+10	3734 999 982	-10.1	0.000 000	-0.003
	100 %	+30	3734 999 985	-7.1	0.000 000	-0.002
	100 %	+40	3734 999 985	-6.5	0.000 000	-0.002
	100 %	+50	3734 999 985	-7.2	0.000 000	-0.002
	Lowest voltage	+20	3734 999 985	-7.2	0.000 000	-0.002
3945.000	100 %	+20(Ref)	3944 999 996	0.0	0.000 000	0.000
	100 %	-30	3944 999 994	-2.1	0.000 000	-0.001
	100 %	-20	3944 999 994	-1.9	0.000 000	0.000
	100 %	-10	3944 999 993	-3.2	0.000 000	-0.001
	100 %	0	3944 999 996	0.5	0.000 000	0.000
	100 %	+10	3944 999 994	-2.0	0.000 000	-0.001
	100 %	+30	3944 999 993	-2.7	0.000 000	-0.001
	100 %	+40	3944 999 995	-0.7	0.000 000	0.000
	100 %	+50	3944 999 996	0.0	0.000 000	0.000
	Lowest voltage	+20	3944 999 994	-1.3	0.000 000	0.000

- ▣ BandWidth: 80 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3740.010	100 %	+20(Ref)	3740 009 991	0.0	0.000 000	0.000
	100 %	-30	3740 009 982	-8.9	0.000 000	-0.002
	100 %	-20	3740 009 982	-9.1	0.000 000	-0.002
	100 %	-10	3740 009 982	-9.2	0.000 000	-0.002
	100 %	0	3740 009 983	-8.2	0.000 000	-0.002
	100 %	+10	3740 009 982	-9.3	0.000 000	-0.002
	100 %	+30	3740 009 984	-7.2	0.000 000	-0.002
	100 %	+40	3740 009 985	-6.6	0.000 000	-0.002
	100 %	+50	3740 009 984	-7.3	0.000 000	-0.002
	Lowest voltage	+20	3740 009 986	-5.6	0.000 000	-0.001
3939.990	100 %	+20(Ref)	3939 989 994	0.0	0.000 000	0.000
	100 %	-30	3939 989 990	-4.3	0.000 000	-0.001
	100 %	-20	3939 989 991	-3.1	0.000 000	-0.001
	100 %	-10	3939 989 988	-5.5	0.000 000	-0.001
	100 %	0	3939 989 990	-3.9	0.000 000	-0.001
	100 %	+10	3939 989 990	-3.6	0.000 000	-0.001
	100 %	+30	3939 989 990	-3.7	0.000 000	-0.001
	100 %	+40	3939 989 990	-3.9	0.000 000	-0.001
	100 %	+50	3939 989 991	-2.5	0.000 000	-0.001
	Lowest voltage	+20	3939 989 990	-4.1	0.000 000	-0.001

- ▣ BandWidth: 90 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3745.020	100 %	+20(Ref)	3745 019 990	0.0	0.000 000	0.000
	100 %	-30	3745 019 979	-10.5	0.000 000	-0.003
	100 %	-20	3745 019 981	-9.1	0.000 000	-0.002
	100 %	-10	3745 019 982	-8.2	0.000 000	-0.002
	100 %	0	3745 019 983	-6.5	0.000 000	-0.002
	100 %	+10	3745 019 982	-7.8	0.000 000	-0.002
	100 %	+30	3745 019 981	-8.7	0.000 000	-0.002
	100 %	+40	3745 019 981	-8.7	0.000 000	-0.002
	100 %	+50	3745 019 982	-7.5	0.000 000	-0.002
	Lowest voltage	+20	3745 019 981	-8.7	0.000 000	-0.002
3934.980	100 %	+20(Ref)	3934 979 995	0.0	0.000 000	0.000
	100 %	-30	3934 979 993	-2.2	0.000 000	-0.001
	100 %	-20	3934 979 991	-3.7	0.000 000	-0.001
	100 %	-10	3934 979 993	-1.9	0.000 000	0.000
	100 %	0	3934 979 992	-3.3	0.000 000	-0.001
	100 %	+10	3934 979 991	-3.5	0.000 000	-0.001
	100 %	+30	3934 979 991	-4.1	0.000 000	-0.001
	100 %	+40	3934 979 991	-4.0	0.000 000	-0.001
	100 %	+50	3934 979 991	-3.6	0.000 000	-0.001
	Lowest voltage	+20	3934 979 991	-4.0	0.000 000	-0.001

- ▣ BandWidth: 100 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3750.000	100 %	+20(Ref)	3749 999 996	0.0	0.000 000	0.000
	100 %	-30	3749 999 988	-8.1	0.000 000	-0.002
	100 %	-20	3749 999 990	-6.1	0.000 000	-0.002
	100 %	-10	3749 999 990	-6.3	0.000 000	-0.002
	100 %	0	3749 999 990	-6.6	0.000 000	-0.002
	100 %	+10	3749 999 988	-8.7	0.000 000	-0.002
	100 %	+30	3749 999 988	-8.6	0.000 000	-0.002
	100 %	+40	3749 999 990	-6.3	0.000 000	-0.002
	100 %	+50	3749 999 990	-6.3	0.000 000	-0.002
	Lowest voltage	+20	3749 999 989	-6.9	0.000 000	-0.002
3930.000	100 %	+20(Ref)	3929 999 997	0.0	0.000 000	0.000
	100 %	-30	3929 999 995	-2.4	0.000 000	-0.001
	100 %	-20	3929 999 992	-5.1	0.000 000	-0.001
	100 %	-10	3929 999 993	-4.2	0.000 000	-0.001
	100 %	0	3929 999 994	-3.1	0.000 000	-0.001
	100 %	+10	3929 999 994	-3.4	0.000 000	-0.001
	100 %	+30	3929 999 993	-3.8	0.000 000	-0.001
	100 %	+40	3929 999 994	-3.4	0.000 000	-0.001
	100 %	+50	3929 999 993	-3.9	0.000 000	-0.001
	Lowest voltage	+20	3929 999 992	-5.5	0.000 000	-0.001

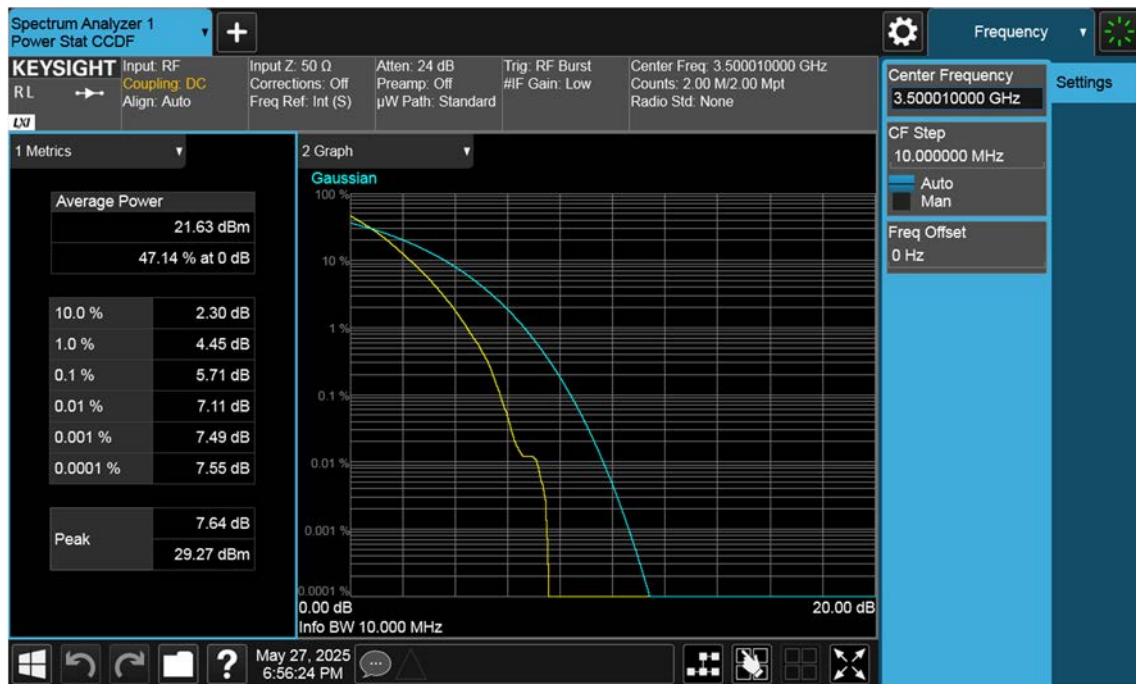
12. TEST PLOTS (MIMO1)

12.1 3450 MHz - 3550 MHz

n77(3450~3550 MHz)_10 M_PAR_Mid_BPSK_FullRB



n77(3450~3550 MHz)_10 M_PAR_Mid_QPSK_FullRB



n77(3450~3550 MHz)_10 M_PAR_Mid_16QAM_FullRB



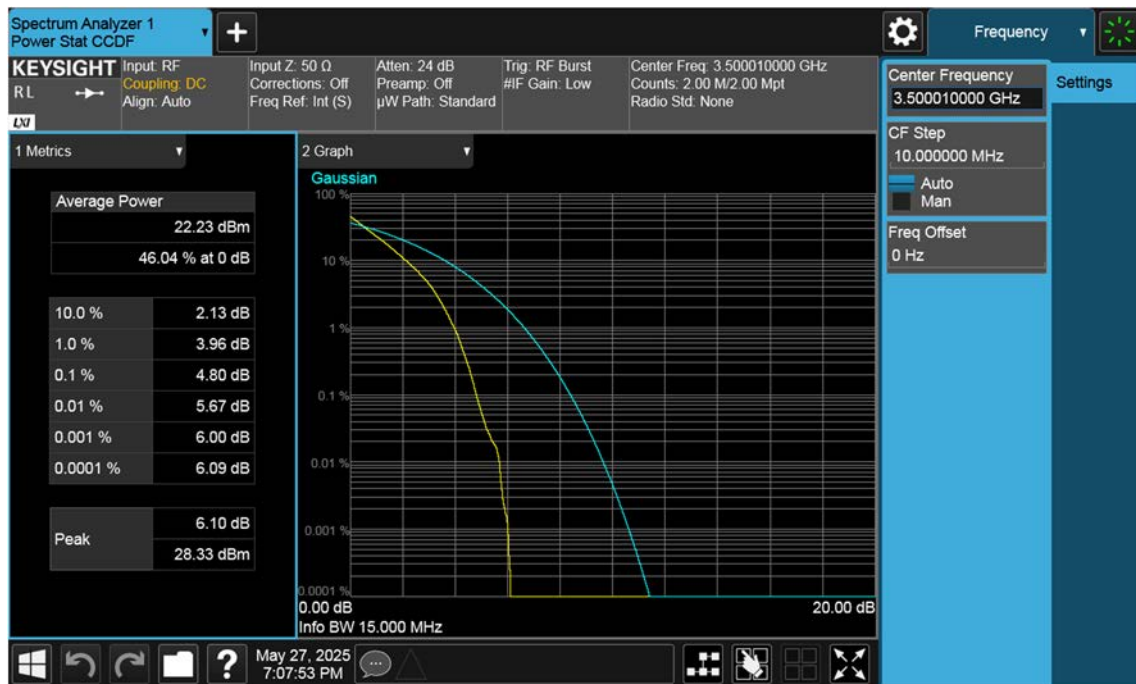
n77(3450~3550 MHz)_10 M_PAR_Mid_64QAM_FullRB



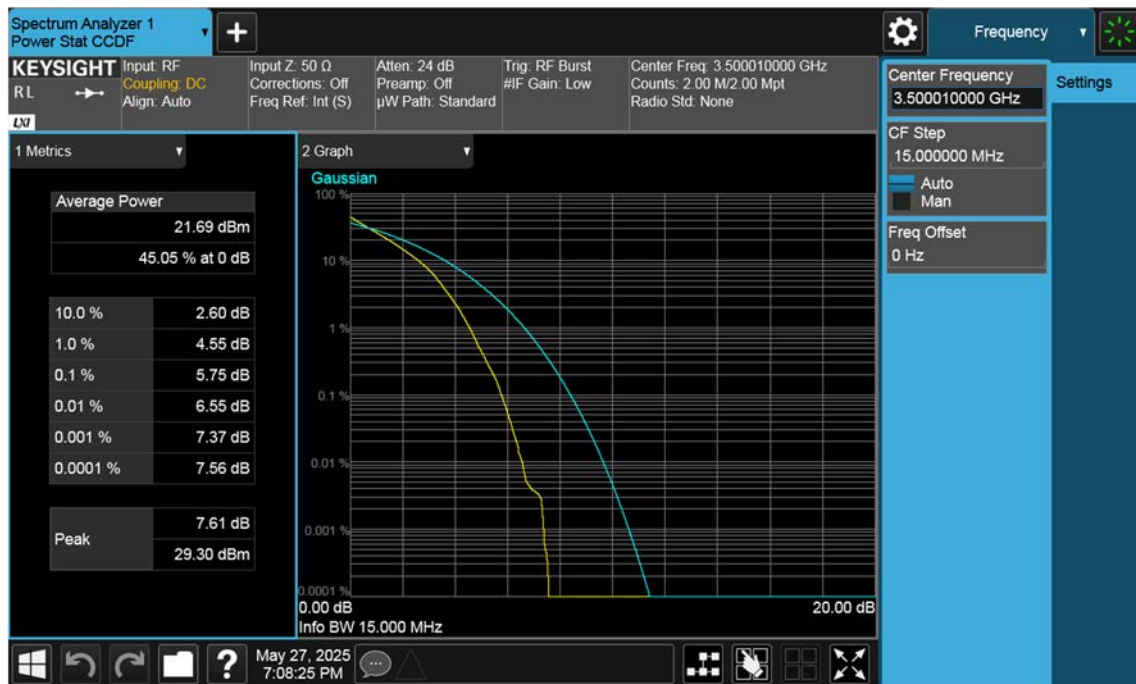
n77(3450~3550 MHz)_10 M_PAR_Mid_256QAM_FullRB



n77(3450~3550 MHz)_15 M_PAR_Mid_BPSK_FullRB



n77(3450~3550 MHz)_15 M_PAR_Mid_QPSK_FullRB



n77(3450~3550 MHz)_15 M_PAR_Mid_16QAM_FullRB



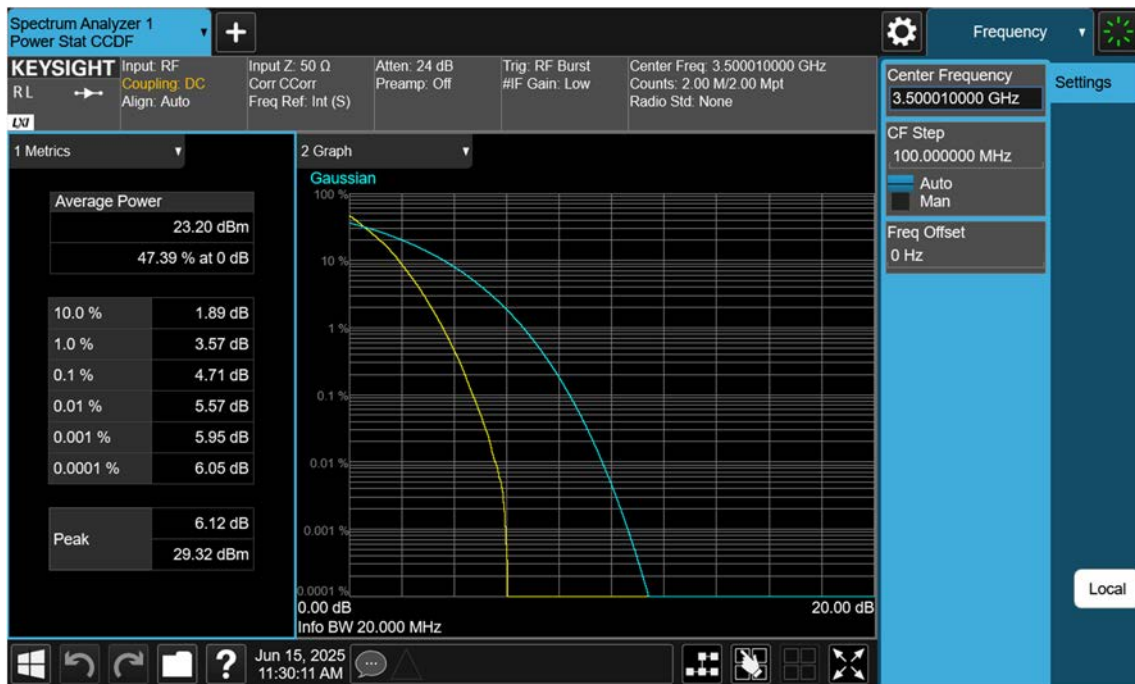
n77(3450~3550 MHz)_15 M_PAR_Mid_64QAM_FullRB



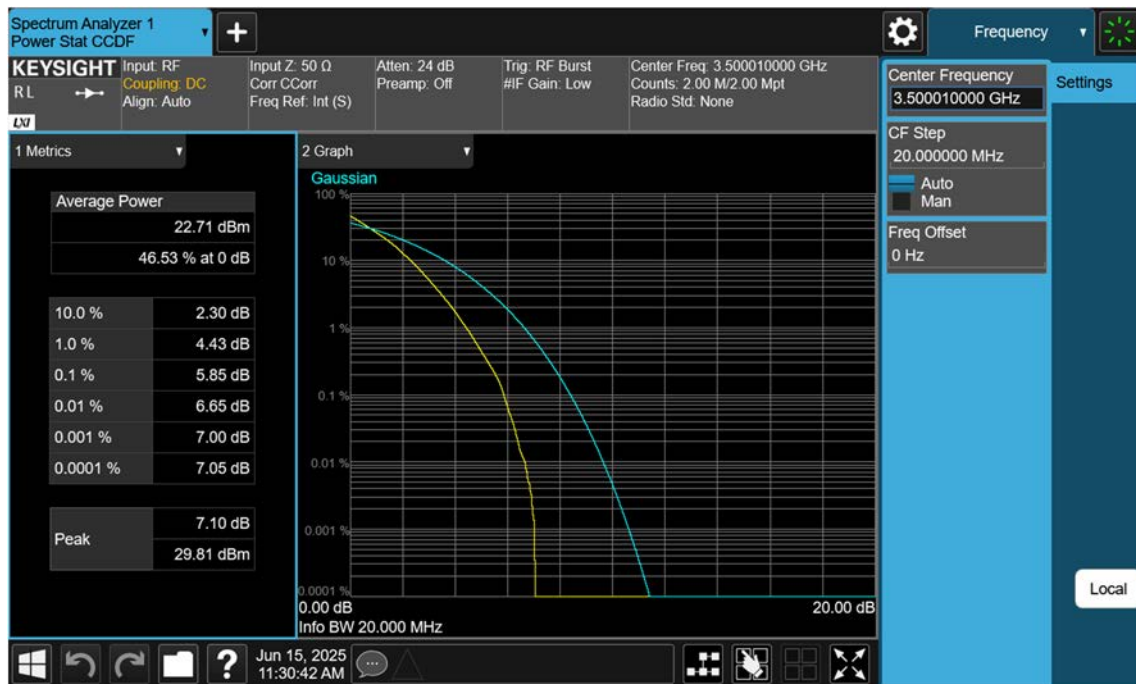
n77(3450~3550 MHz)_15 M_PAR_Mid_256QAM_FullRB



n77(3450~3550 MHz)_20 M_PAR_Mid_BPSK_FullRB



n77(3450~3550 MHz)_20 M_PAR_Mid_QPSK_FullRB



n77(3450~3550 MHz)_20 M_PAR_Mid_16QAM_FullRB



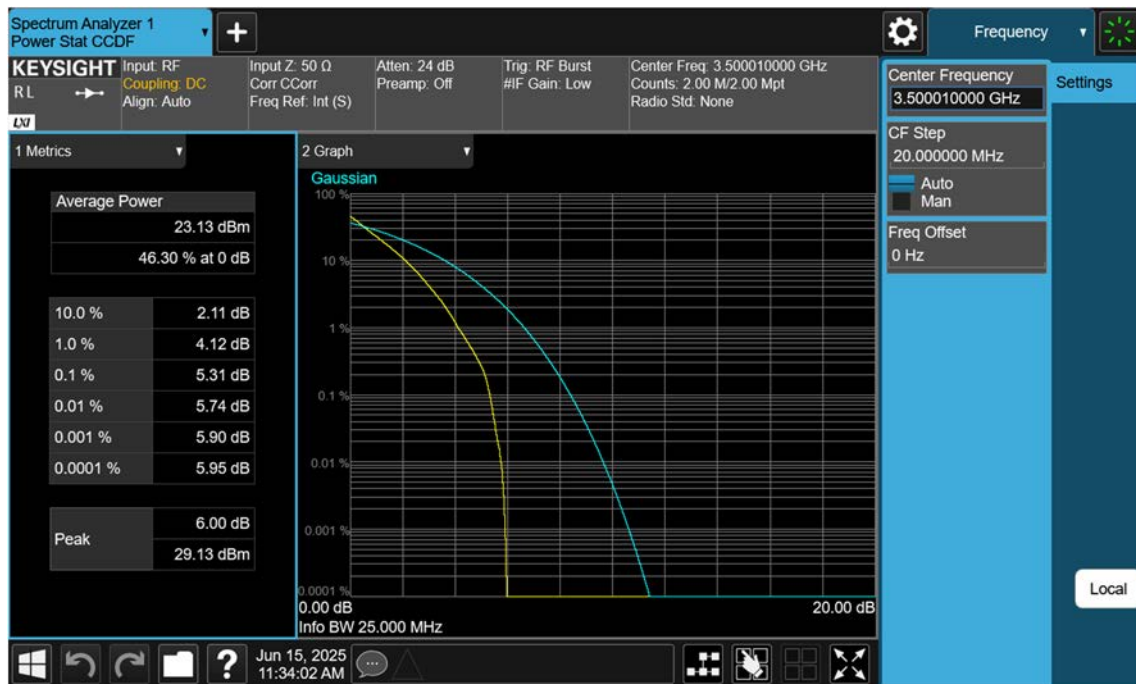
n77(3450~3550 MHz)_20 M_PAR_Mid_64QAM_FullRB



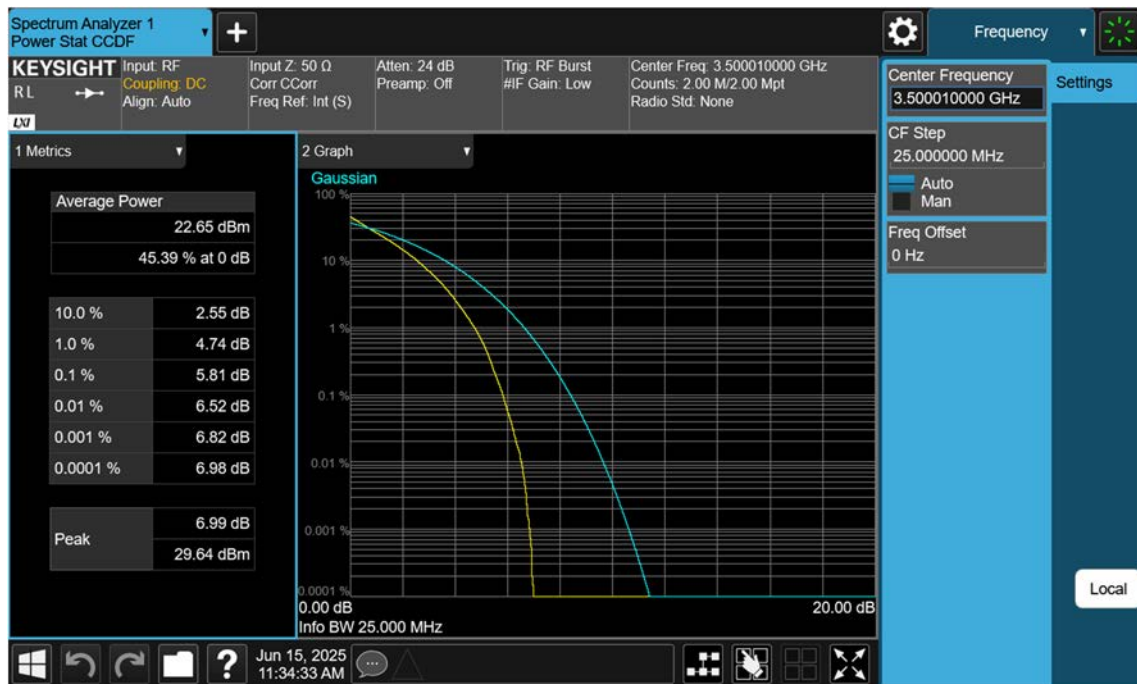
n77(3450~3550 MHz)_20 M_PAR_Mid_256QAM_FullRB



n77(3450~3550 MHz)_25 M_PAR_Mid_BPSK_FullRB



n77(3450~3550 MHz)_25 M_PAR_Mid_QPSK_FullRB



n77(3450~3550 MHz)_25 M_PAR_Mid_16QAM_FullRB



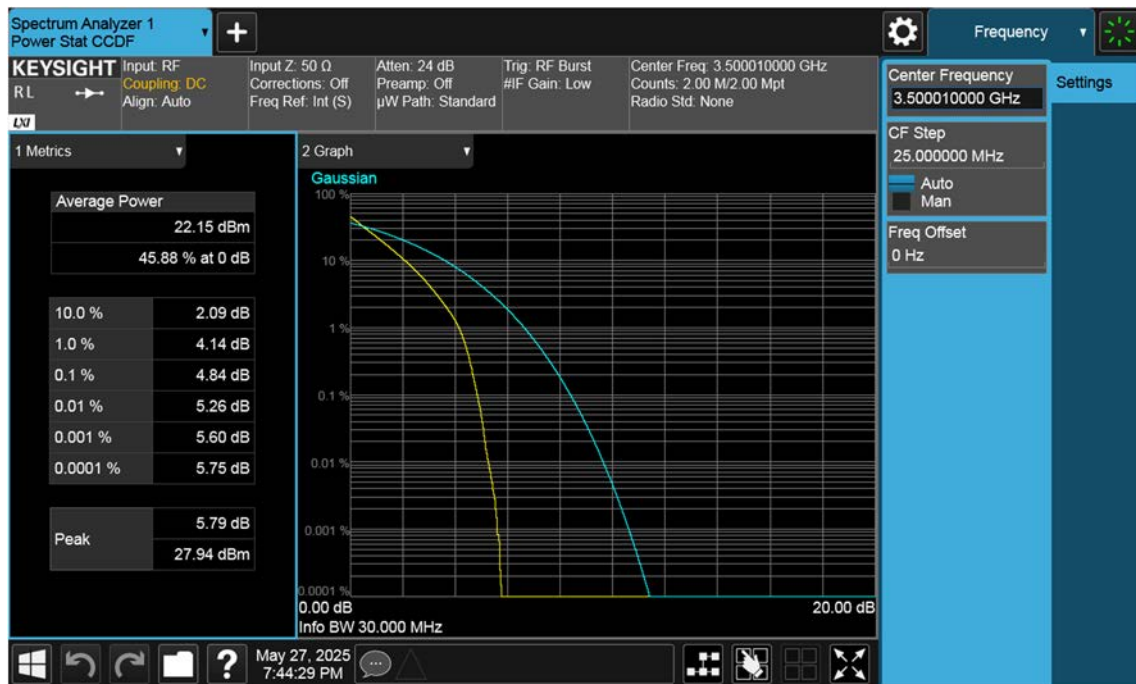
n77(3450~3550 MHz)_25 M_PAR_Mid_64QAM_FullRB



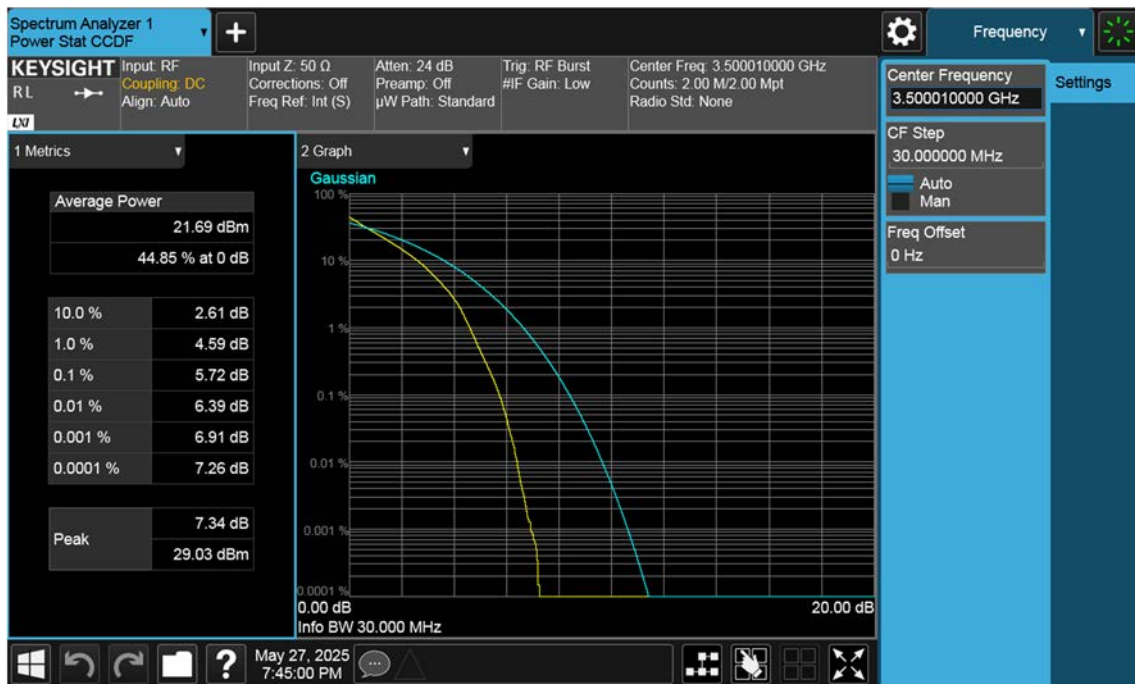
n77(3450~3550 MHz)_25 M_PAR_Mid_256QAM_FullRB



n77(3450~3550 MHz)_30 M_PAR_Mid_BPSK_FullRB



n77(3450~3550 MHz)_30 M_PAR_Mid_QPSK_FullRB



n77(3450~3550 MHz)_30 M_PAR_Mid_16QAM_FullRB



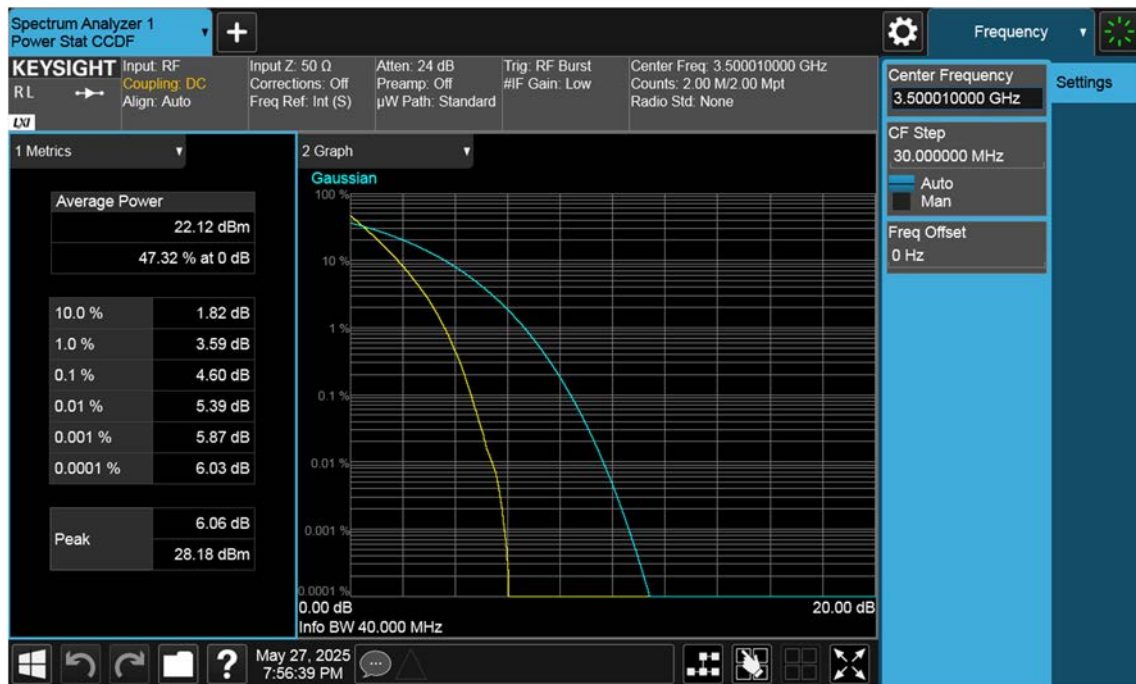
n77(3450~3550 MHz)_30 M_PAR_Mid_64QAM_FullRB



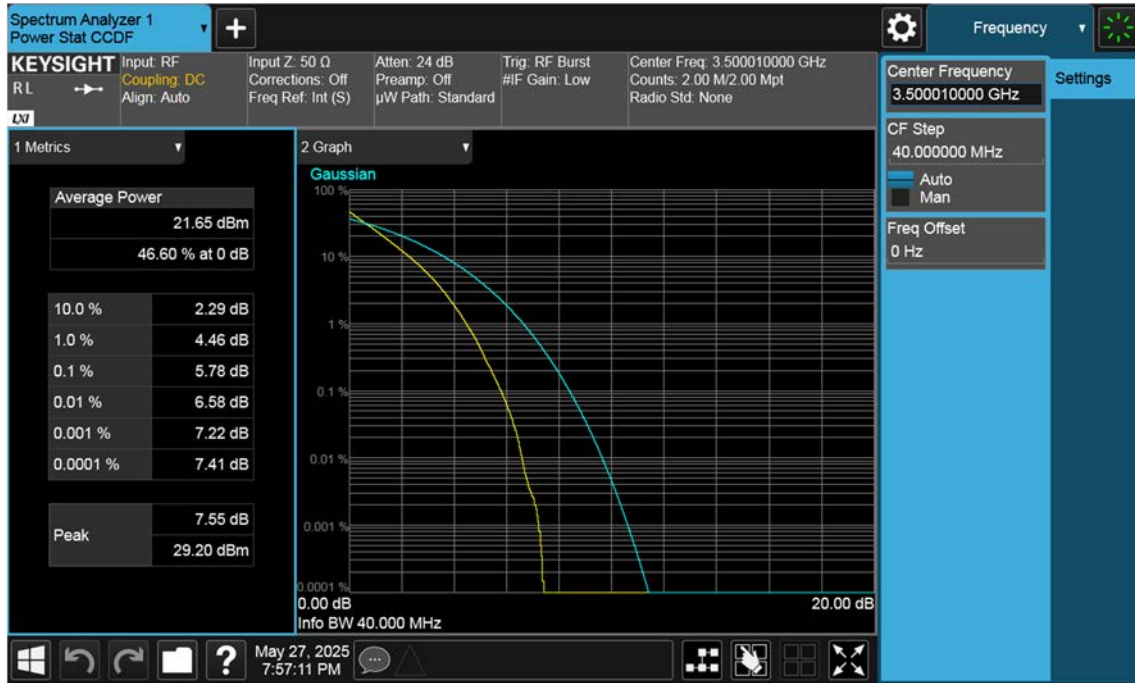
n77(3450~3550 MHz)_30 M_PAR_Mid_256QAM_FullRB



n77(3450~3550 MHz)_40 M_PAR_Mid_BPSK_FullRB



n77(3450~3550 MHz)_40 M_PAR_Mid_QPSK_FullRB



n77(3450~3550 MHz)_40 M_PAR_Mid_16QAM_FullRB



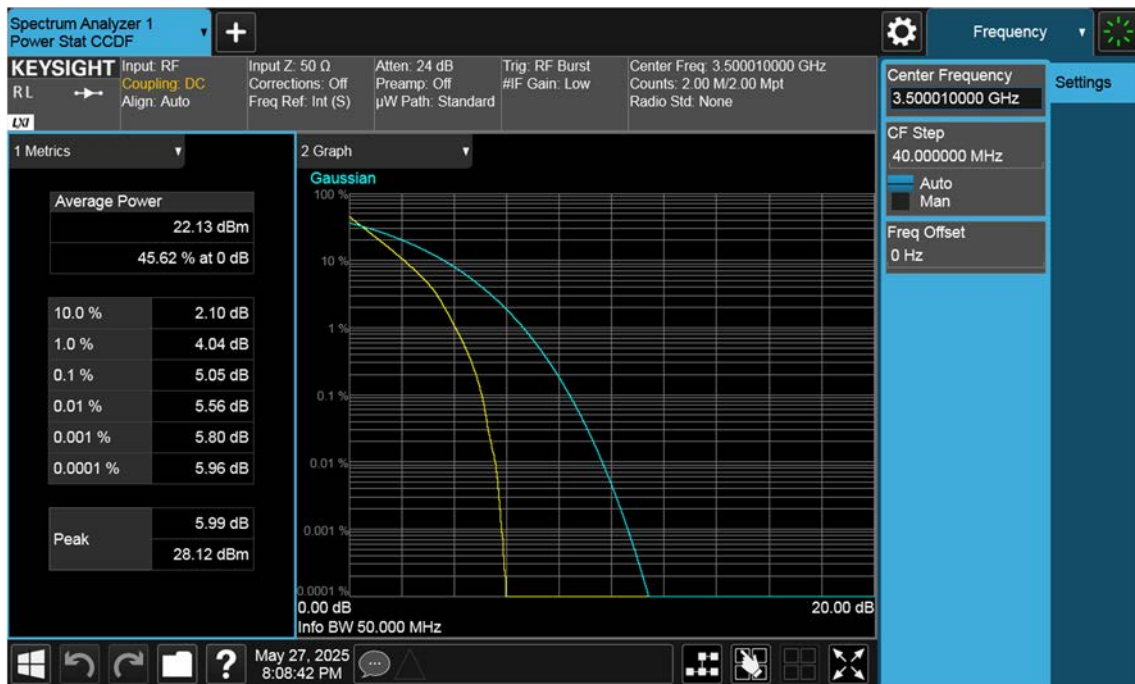
n77(3450~3550 MHz)_40 M_PAR_Mid_64QAM_FullRB



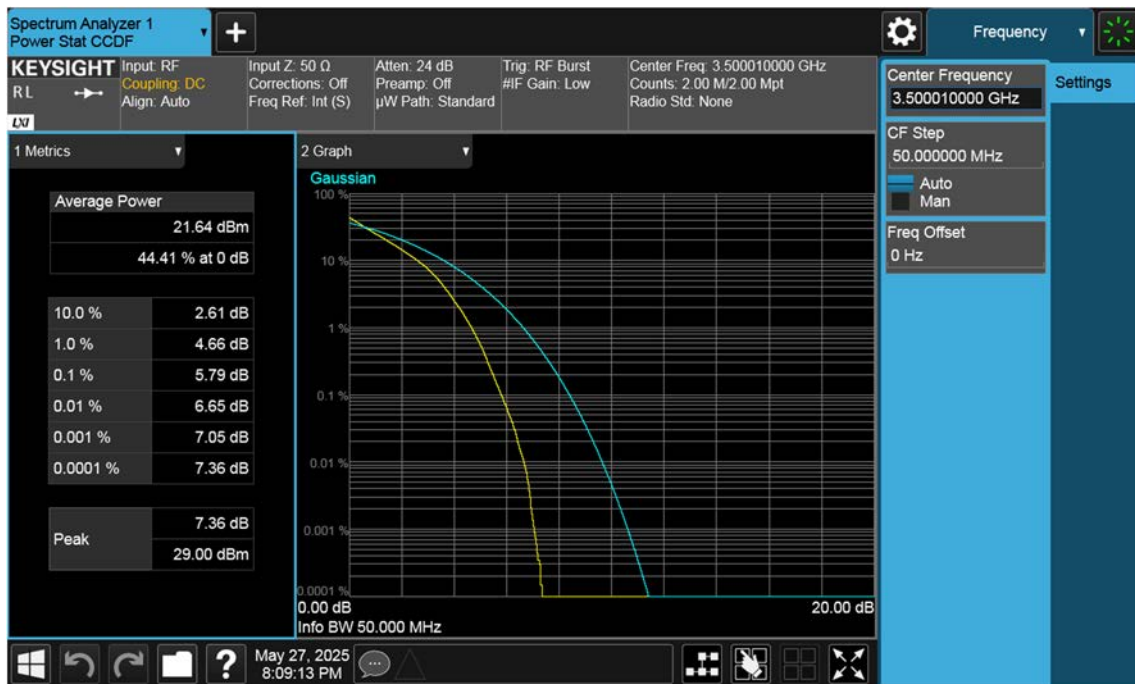
n77(3450~3550 MHz)_40 M_PAR_Mid_256QAM_FullRB



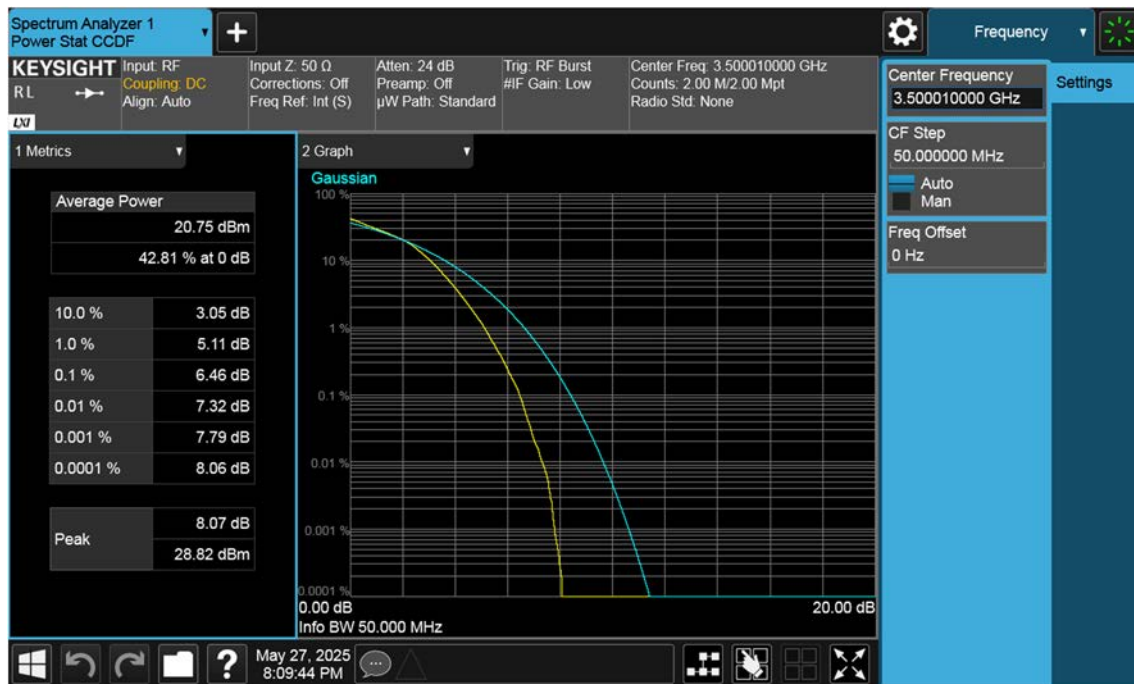
n77(3450~3550 MHz)_50 M_PAR_Mid_BPSK_FullRB



n77(3450~3550 MHz)_50 M_PAR_Mid_QPSK_FullRB



n77(3450~3550 MHz)_50 M_PAR_Mid_16QAM_FullRB



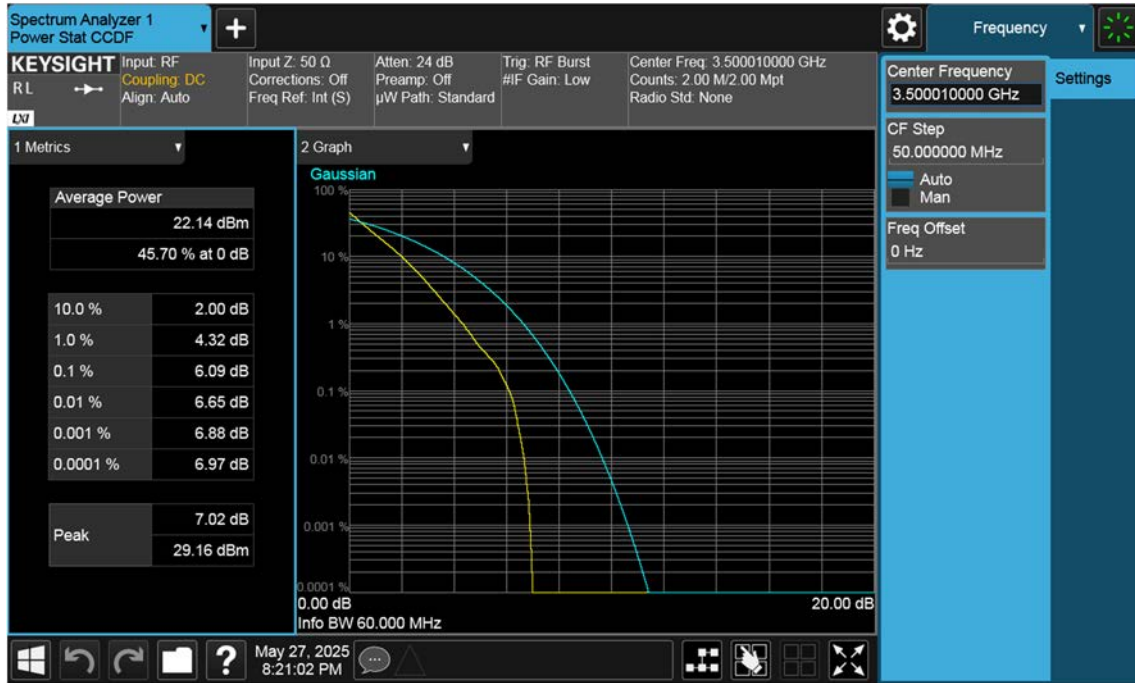
n77(3450~3550 MHz)_50 M_PAR_Mid_64QAM_FullRB



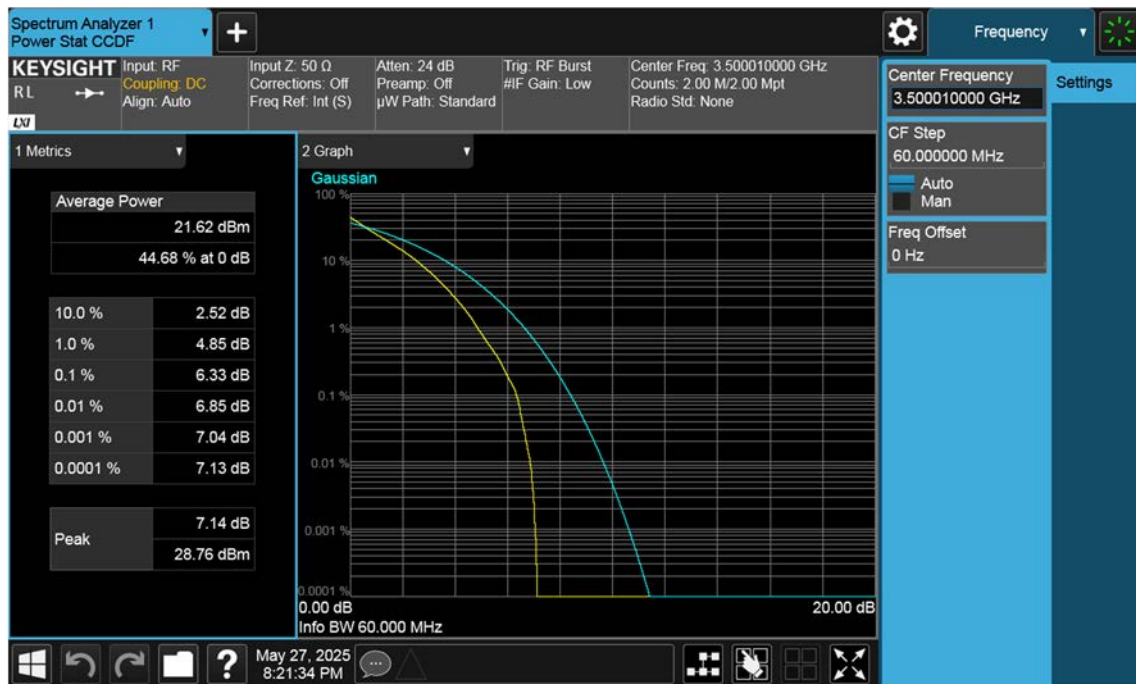
n77(3450~3550 MHz)_50 M_PAR_Mid_256QAM_FullRB



n77(3450~3550 MHz)_60 M_PAR_Mid_BPSK_FullRB



n77(3450~3550 MHz)_60 M_PAR_Mid_QPSK_FullRB



n77(3450~3550 MHz)_60 M_PAR_Mid_16QAM_FullRB



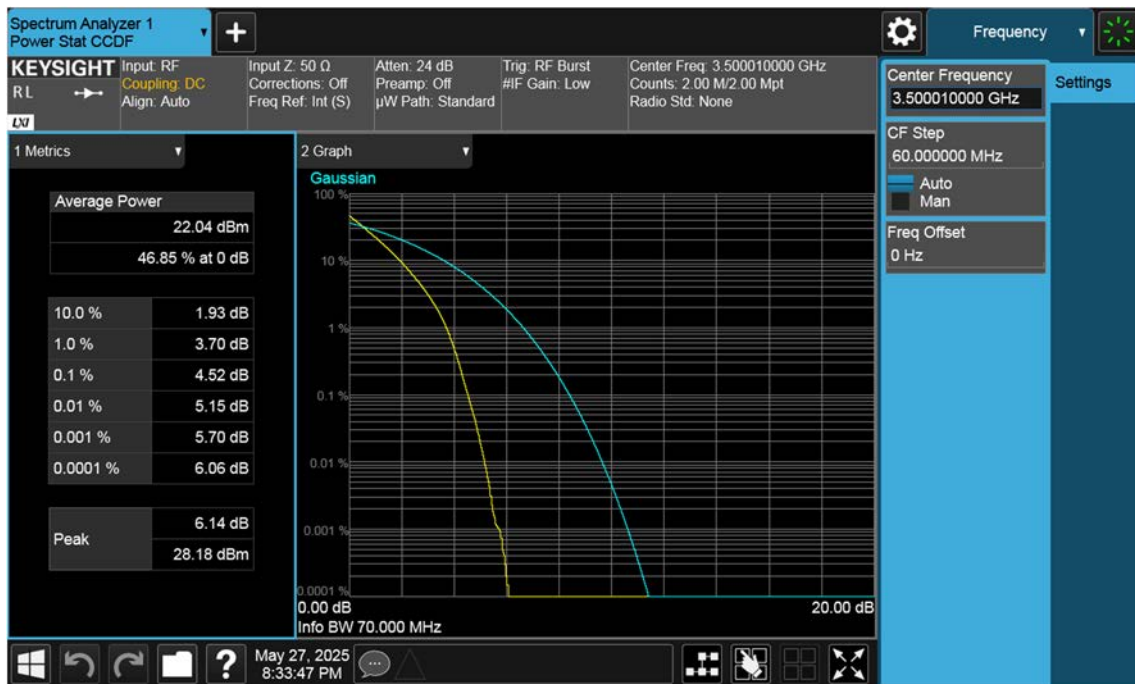
n77(3450~3550 MHz)_60 M_PAR_Mid_64QAM_FullRB



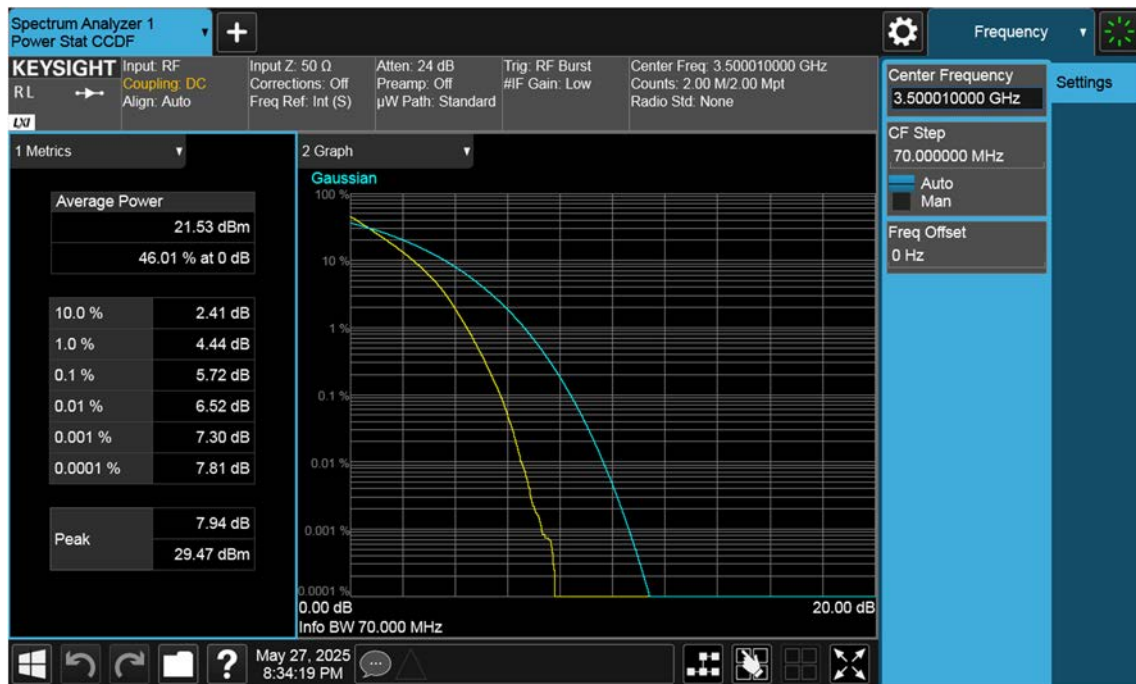
n77(3450~3550 MHz)_60 M_PAR_Mid_256QAM_FullRB



n77(3450~3550 MHz)_70 M_PAR_Mid_BPSK_FullRB



n77(3450~3550 MHz)_70 M_PAR_Mid_QPSK_FullRB



n77(3450~3550 MHz)_70 M_PAR_Mid_16QAM_FullRB



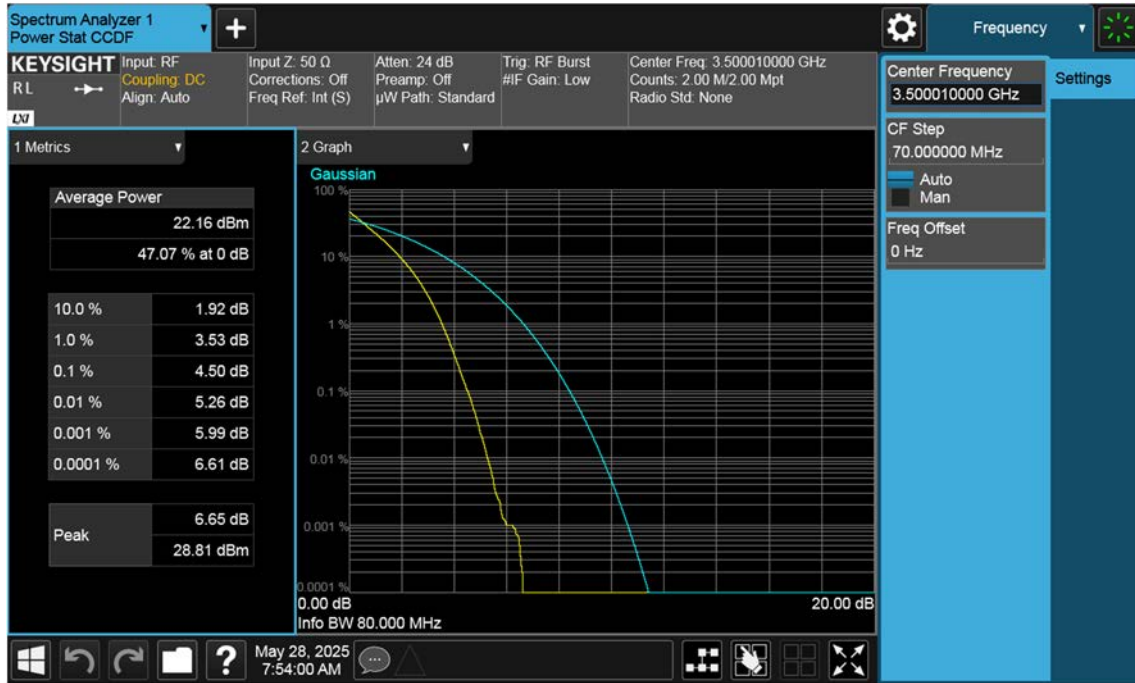
n77(3450~3550 MHz)_70 M_PAR_Mid_64QAM_FullRB



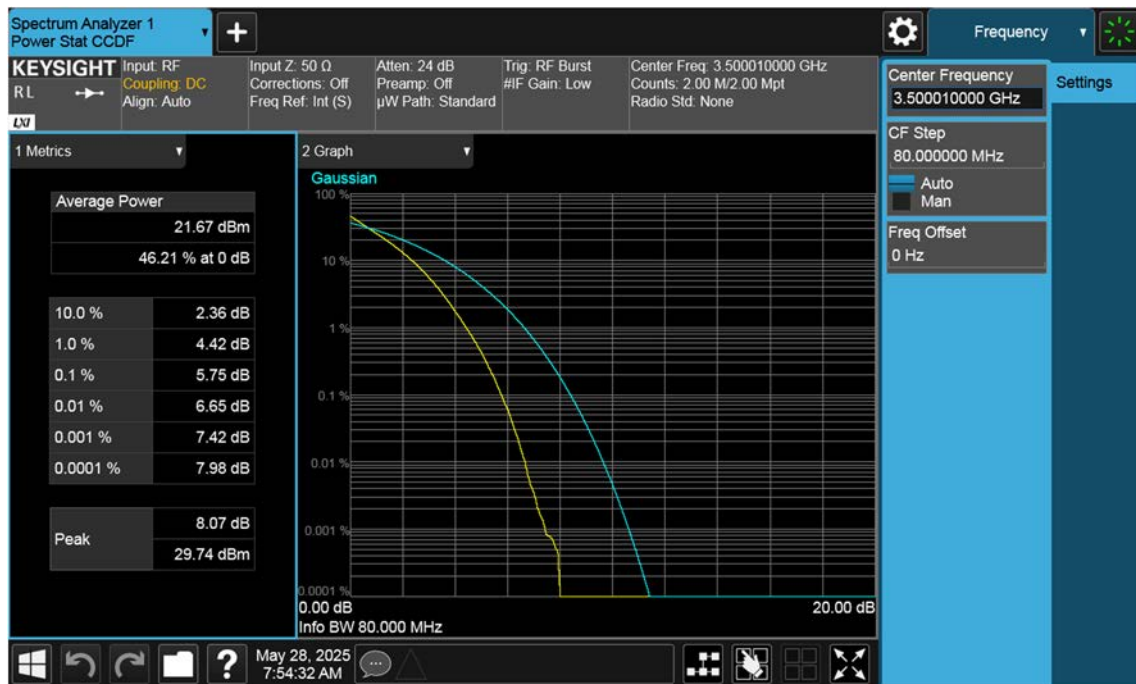
n77(3450~3550 MHz)_70 M_PAR_Mid_256QAM_FullRB



n77(3450~3550 MHz)_80 M_PAR_Mid_BPSK_FullRB



n77(3450~3550 MHz)_80 M_PAR_Mid_QPSK_FullRB



n77(3450~3550 MHz)_80 M_PAR_Mid_16QAM_FullRB



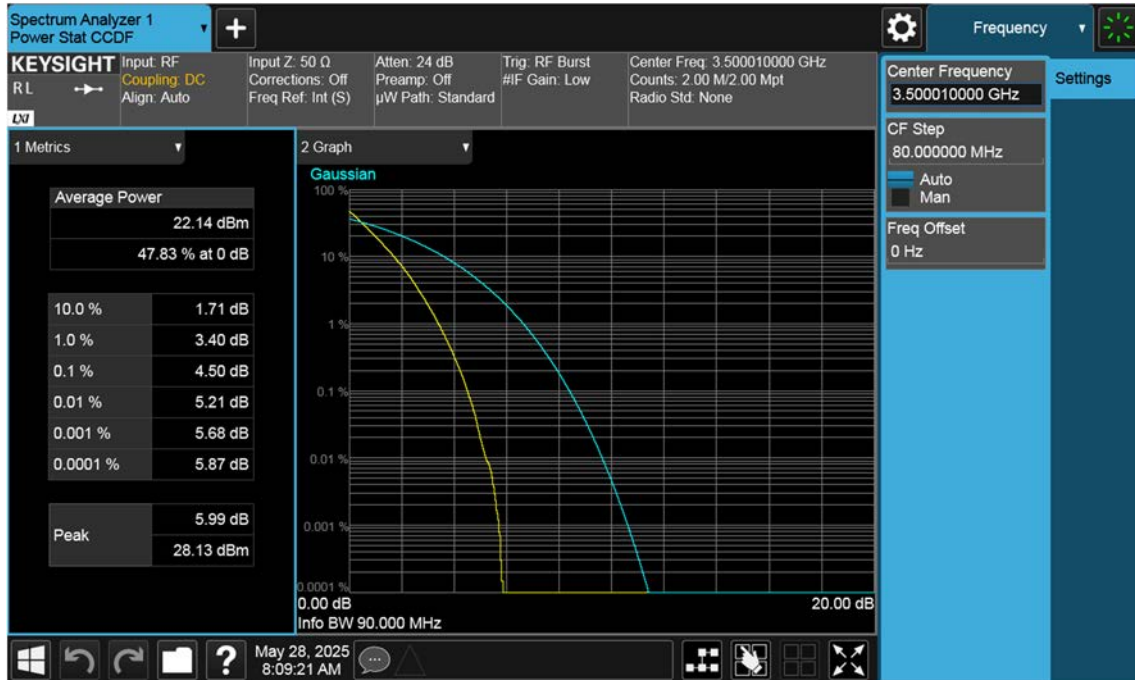
n77(3450~3550 MHz)_80 M_PAR_Mid_64QAM_FullRB



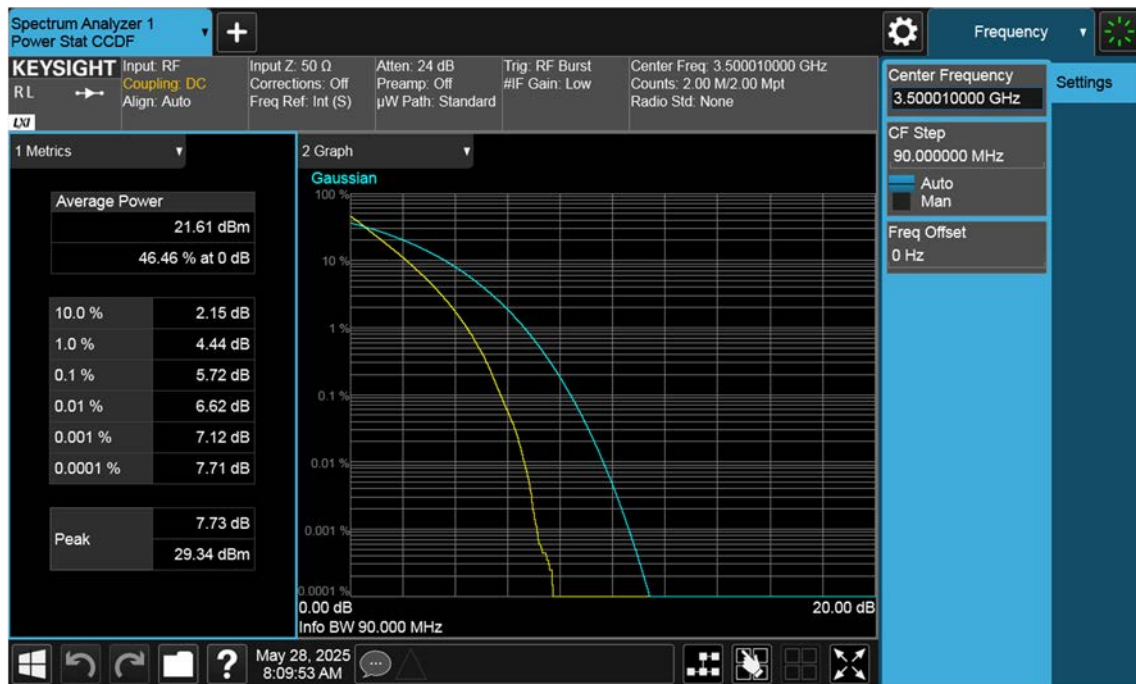
n77(3450~3550 MHz)_80 M_PAR_Mid_256QAM_FullRB



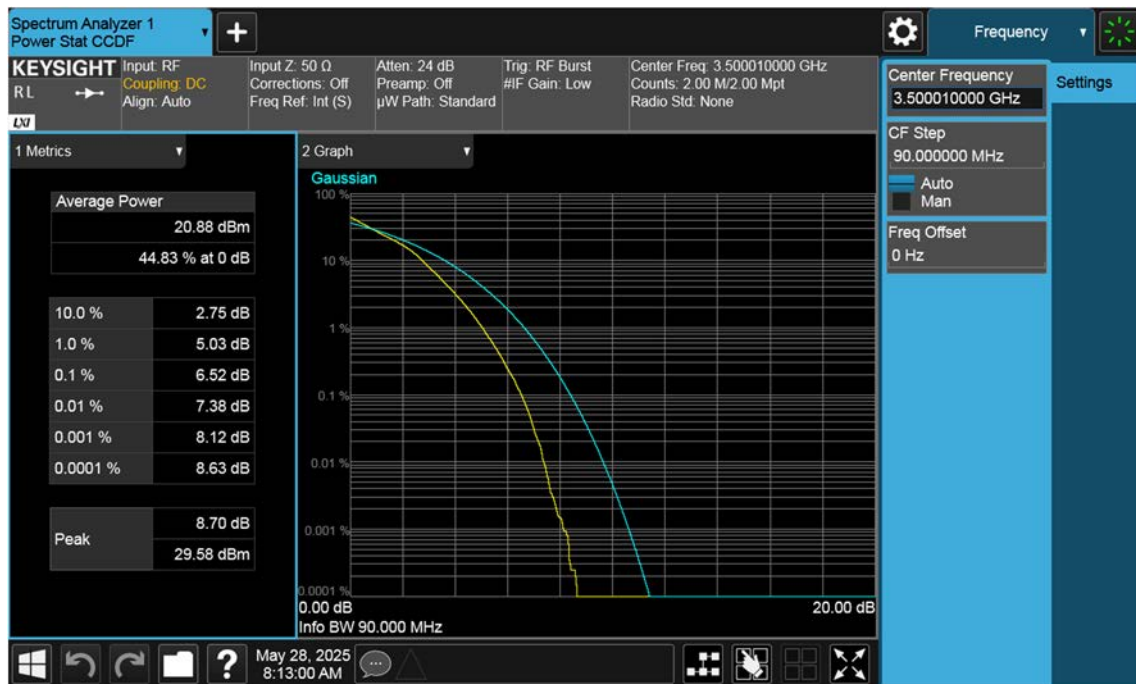
n77(3450~3550 MHz)_90 M_PAR_Mid_BPSK_FullRB



n77(3450~3550 MHz)_90 M_PAR_Mid_QPSK_FullRB



n77(3450~3550 MHz)_90 M_PAR_Mid_16QAM_FullRB



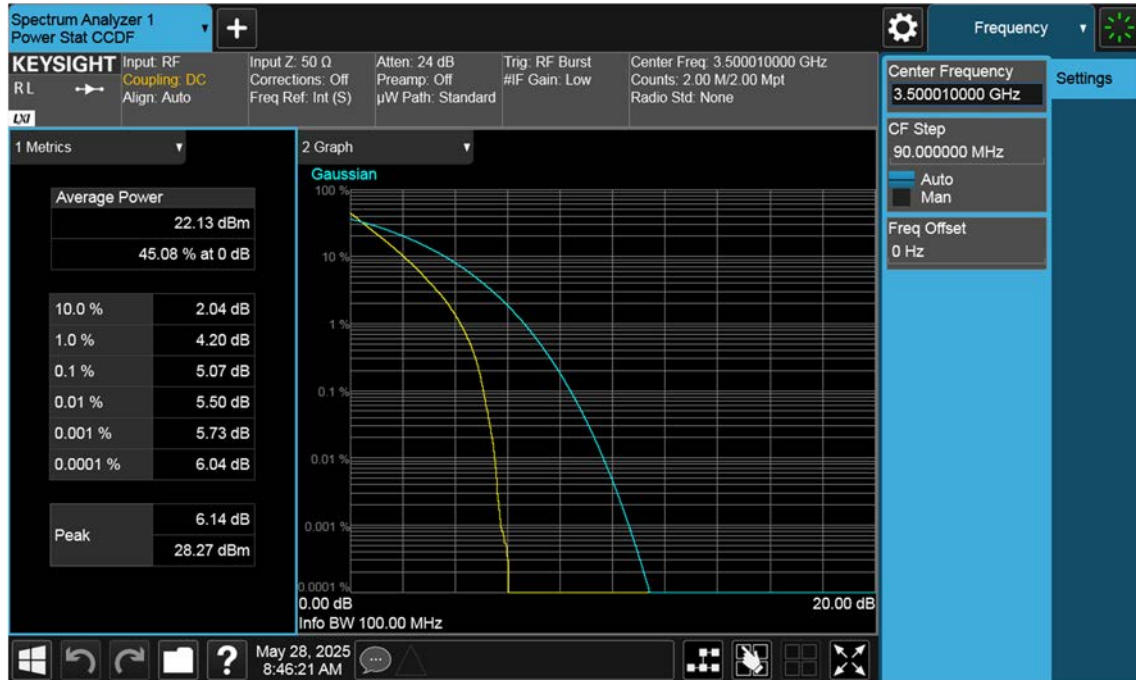
n77(3450~3550 MHz)_90 M_PAR_Mid_64QAM_FullRB



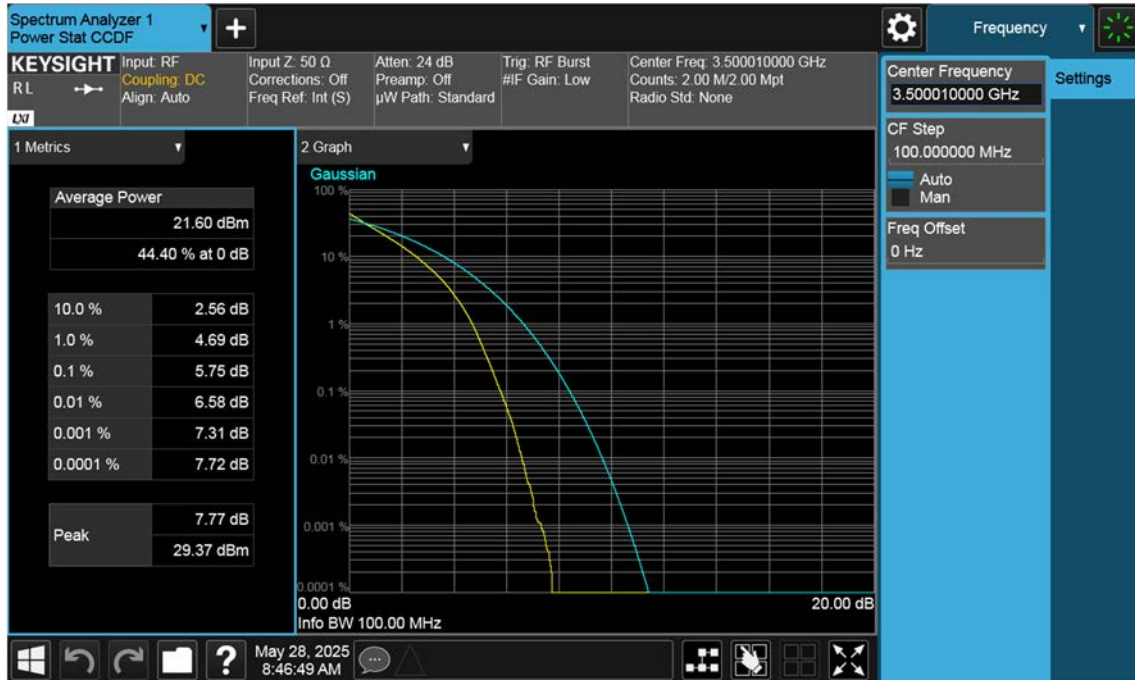
n77(3450~3550 MHz)_90 M_PAR_Mid_256QAM_FullRB



n77(3450~3550 MHz)_100 M_PAR_Mid_BPSK_FullRB



n77(3450~3550 MHz)_100 M_PAR_Mid_QPSK_FullRB



n77(3450~3550 MHz)_100 M_PAR_Mid_16QAM_FullRB



n77(3450~3550 MHz)_100 M_PAR_Mid_64QAM_FullRB

