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TEST REPORT

FCC Sub6 Test for TFGMEIBBCD4
Certification

APPLICANT
LG Electronics Inc.

REPORT NO.
HCT-RF-2310-FC003

DATE OF ISSUE
October 5, 2023

Tested by
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Jong Seok Lee

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TEST REPORT

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Additional Model
TFGMEIBBCD5, TFGMEIBBCD6, TFGMEIBBCD7, TFGMEIBBCD8, TFGMEIBBCD9, TFGMEIBBCDA, TFGMEIBBCDB, TFGMEIBBCDC

Applicant	**LG Electronics Inc.** 10, MagokJungang-ro, Gangseo-gu, Seoul 07796, Republic of Korea
Eut Type Model Name	GM Onstar Gen12 ROW TFGMEIBBCD4
FCC ID	BEJTFGMEIBBCD4
FCC Classification:	PCS Licensed Transmitter (PCB)
FCC Rule Part(s):	§ 27, § 2

The result shown in this test report refer only to the sample(s) tested unless otherwise stated.
This test results were applied only to the test methods required by the standard.

REVISION HISTORY

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

Revision No.	Date of Issue	Description
0	October 06, 2023	Initial Release

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)

Test Report Statement:
The above Test Report is not related to the accredited test result by (KS Q) ISO/IEC 17025 and KOLAS(Korea Laboratory Accreditation Scheme) / A2LA(American Association for Laboratory Accreditation), which signed the ILAC-MRA.

If this report is required to confirmation of authenticity, please contact to www.hct.co.kr

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MEASUREMENT REPORT

1. GENERAL INFORMATION

Applicant Name:	LG Electronics Inc.
Address:	10, Magok Jungang-ro, Gangseo-gu, Seoul 07796, Republic of Korea
FCC ID:	BEJTFGMEIBBCD4
Application Type:	Certification
FCC Classification:	PCS Licensed Transmitter (PCB)
FCC Rule Part(s):	§ 27, § 2
EUT Type:	GM Onstar Gen12 ROW
Model(s):	TFGMEIBBCD4
Additional Model:	TFGMEIBBCD5,TFGMEIBBCD6,TFGMEIBBCD7,TFGMEIBBCD8, TFGMEIBBCD9, TFGMEIBBCDA, TFGMEIBBCDB, TFGMEIBBCDC
SCS(kHz):	30
Bandwidth(MHz):	20, 30, 40, 50, 60, 70, 80, 90, 100
Waveform:	CP-OFDM, DFT-S-OFDM
Modulation:	DFT-S-OFDM: PI/2 BPSK, QPSK, 16QAM, 64QAM CP-OFDM: QPSK, 16QAM, 64QAM
[NR n77,78] Tx Frequency: (3450 MHz - 3550 MHz)	3460.02 MHz – 3540.00 MHz (Sub6 n77(78)(20 MHz)) 3465.00 MHz – 3534.99 MHz (Sub6 n77(78)(30 MHz)) 3470.01 MHz – 3529.98 MHz (Sub6 n77(78)(40 MHz)) 3475.02 MHz – 3525.00 MHz (Sub6 n77(78)(50 MHz)) 3480.00 MHz – 3519.99 MHz (Sub6 n77(78)(60 MHz)) 3485.01 MHz – 3514.98 MHz (Sub6 n77(78)(70 MHz)) 3490.02 MHz – 3510.00 MHz (Sub6 n77(78)(80 MHz)) 3495.00 MHz – 3504.99 MHz (Sub6 n77(78)(90 MHz)) 3500.01 MHz (Sub6 n77(78)(100 MHz))
[NR n77] Tx Frequency: (3700 MHz - 3980 MHz) [NR n78] Tx Frequency: (3700 MHz - 3800 MHz)	3710.01 MHz – 3969.99 MHz (Sub6 n77(78)(20 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))
Date(s) of Tests:	February 27, 2023 ~ October 05, 2023
Serial number:	Radiated - External Antenna : EBR36018942_#30 - Internal Antenna : EBR36018942K _#7 - External Antenna, Internal Antenna (MIMO) : EBR42280001K_#16 Conducted: EBR36018829_#69, EBR42280001K_#16
External Antenna Information	ANT5 : 86531607 ANT4 : 86575530 DUT4 : 85608774

1.1. MAXIMUM OUTPUT POWER

1. 3450 MHz - 3550 MHz_SISO

Mode (MHz)	Tx Frequency (MHz)	Emission Designator	Modulation	EIRP External Antenna		EIRP Internal Antenna	
				Max. Power (W)	Max. Power (W)	Max. Power (W)	Max. Power (dBm)
Sub6 n77(78) (20)	3460.02 – 3540.00	17M9G7D	PI/2 BPSK	0.473	26.75	0.422	26.25
		17M9G7D	QPSK	0.451	26.54	0.411	26.14
		18M0W7D	16QAM	0.367	25.65	0.333	25.22
		17M9W7D	64QAM	0.316	24.99	0.241	23.82
Sub6 n77(78) (30)	3465.00 – 3534.99	26M9G7D	PI/2 BPSK	0.485	26.86	0.466	26.68
		26M9G7D	QPSK	0.482	26.83	0.453	26.56
		26M9W7D	16QAM	0.372	25.71	0.370	25.68
		26M9W7D	64QAM	0.258	24.12	0.258	24.11
Sub6 n77(78) (40)	3470.01 – 3529.98	35M9G7D	PI/2 BPSK	0.481	26.82	0.475	26.77
		35M8G7D	QPSK	0.462	26.65	0.460	26.63
		35M9W7D	16QAM	0.379	25.79	0.377	25.76
		35M8W7D	64QAM	0.316	25.00	0.256	24.08
Sub6 n77(78) (50)	3475.02 – 3525.00	45M8G7D	PI/2 BPSK	0.483	26.84	0.439	26.42
		46M0G7D	QPSK	0.463	26.66	0.437	26.40
		45M8W7D	16QAM	0.382	25.82	0.350	25.44
		45M9W7D	64QAM	0.288	24.59	0.248	23.94
Sub6 n77(78) (60)	3480.00 – 3519.99	58M2G7D	PI/2 BPSK	0.465	26.67	0.455	26.58
		58M0G7D	QPSK	0.450	26.53	0.446	26.49
		58M0W7D	16QAM	0.373	25.72	0.361	25.57
		57M9W7D	64QAM	0.280	24.47	0.252	24.02
Sub6 n77(78) (70)	3485.01 – 3514.98	64M5G7D	PI/2 BPSK	0.474	26.76	0.446	26.49
		64M5G7D	QPSK	0.458	26.61	0.440	26.43
		64M6W7D	16QAM	0.373	25.72	0.352	25.46
		64M5W7D	64QAM	0.281	24.48	0.248	23.95
Sub6 n77(78) (80)	3490.02 – 3510.00	77M2G7D	PI/2 BPSK	0.470	26.72	0.451	26.54
		77M3G7D	QPSK	0.461	26.64	0.450	26.53
		77M4W7D	16QAM	0.376	25.75	0.366	25.63
		77M3W7D	64QAM	0.288	24.60	0.256	24.08
Sub6 n77(78) (90)	3495.00 – 3504.99	86M9G7D	PI/2 BPSK	0.500	26.99	0.452	26.55
		87M1G7D	QPSK	0.497	26.96	0.450	26.53
		87M0W7D	16QAM	0.401	26.03	0.362	25.59
		87M0W7D	64QAM	0.271	24.33	0.260	24.15
Sub6 n77(78) (100)	3500.01	97M5G7D	PI/2 BPSK	0.493	26.93	0.410	26.13
		96M5G7D	QPSK	0.488	26.88	0.403	26.05
		96M7W7D	16QAM	0.399	26.01	0.326	25.13
		96M6W7D	64QAM	0.267	24.26	0.238	23.77

2. 3450 MHz - 3550 MHz_MIMO

Mode (MHz)	Tx Frequency (MHz)	Modulation	EIRP External Antenna		EIRP Internal Antenna	
			Max. Power (W)	Max. Power (W)	Max. Power (W)	Max. Power (dBm)
Sub6 n77(78) (20)	3460.02 – 3540.00	QPSK	0.410	26.13	0.743	28.71
		16QAM	0.382	25.82	0.714	28.54
		64QAM	0.240	23.81	0.449	26.52
Sub6 n77(78) (30)	3465.00 – 3534.99	QPSK	0.406	26.08	0.757	28.79
		16QAM	0.339	25.30	0.705	28.48
		64QAM	0.225	23.53	0.463	26.66
Sub6 n77(78) (40)	3470.01 – 3529.98	QPSK	0.383	25.83	0.753	28.77
		16QAM	0.337	25.28	0.714	28.54
		64QAM	0.218	23.39	0.463	26.66
Sub6 n77(78) (50)	3475.02 – 3525.00	QPSK	0.375	25.74	0.753	28.77
		16QAM	0.324	25.11	0.714	28.54
		64QAM	0.213	23.29	0.429	26.32
Sub6 n77(78) (60)	3480.00 – 3519.99	QPSK	0.395	25.97	0.782	28.93
		16QAM	0.342	25.34	0.731	28.64
		64QAM	0.231	23.63	0.446	26.49
Sub6 n77(78) (70)	3485.01 – 3514.98	QPSK	0.396	25.98	0.750	28.75
		16QAM	0.319	25.04	0.705	28.48
		64QAM	0.226	23.55	0.460	26.63
Sub6 n77(78) (80)	3490.02 – 3510.00	QPSK	0.348	25.42	0.752	28.76
		16QAM	0.332	25.21	0.706	28.49
		64QAM	0.233	23.68	0.454	26.57
Sub6 n77(78) (90)	3495.00 – 3504.99	QPSK	0.348	25.41	0.773	28.88
		16QAM	0.326	25.13	0.721	28.58
		64QAM	0.222	23.46	0.443	26.46
Sub6 n77(78) (100)	3500.01	QPSK	0.392	25.93	0.776	28.90
		16QAM	0.315	24.98	0.714	28.54
		64QAM	0.218	23.38	0.445	26.48

3. 3700 MHz - 3980 MHz_SISO

Mode (MHz)	Tx Frequency (MHz)	Emission Designator	Modulation	EIRP External Antenna		EIRP Internal Antenna	
				Max. Power (W)	Max. Power (W)	Max. Power (W)	Max. Power (dBm)
Sub6 n77(78) (20)	3710.01 – 3969.99	17M9G7D	PI/2 BPSK	0.327	25.14	0.499	26.98
		17M9G7D	QPSK	0.326	25.13	0.495	26.95
		17M9W7D	16QAM	0.258	24.11	0.409	26.12
		17M9W7D	64QAM	0.231	23.64	0.371	25.69
Sub6 n77(78) (30)	3715.02 – 3964.98	26M8G7D	PI/2 BPSK	0.388	25.89	0.522	27.18
		26M9G7D	QPSK	0.358	25.54	0.520	27.16
		26M9W7D	16QAM	0.288	24.59	0.413	26.16
		27M0W7D	64QAM	0.204	23.09	0.298	24.74
Sub6 n77(78) (40)	3720.00 – 3960.00	35M8G7D	PI/2 BPSK	0.352	25.47	0.517	27.14
		35M8G7D	QPSK	0.344	25.37	0.515	27.12
		35M8W7D	16QAM	0.283	24.52	0.419	26.22
		35M8W7D	64QAM	0.237	23.74	0.362	25.59
Sub6 n77(78) (50)	3725.10 – 3954.99	45M9G7D	PI/2 BPSK	0.381	25.81	0.579	27.63
		45M9G7D	QPSK	0.368	25.66	0.558	27.47
		45M8W7D	16QAM	0.302	24.80	0.462	26.65
		45M9W7D	64QAM	0.239	23.79	0.363	25.60
Sub6 n77(78) (60)	3730.02 – 3949.98	58M1G7D	PI/2 BPSK	0.426	26.29	0.565	27.52
		58M0G7D	QPSK	0.414	26.17	0.564	27.51
		58M0W7D	16QAM	0.345	25.38	0.463	26.66
		58M0W7D	64QAM	0.262	24.19	0.366	25.63
Sub6 n77(78) (70)	3735.00 – 3945.00	64M8G7D	PI/2 BPSK	0.390	25.91	0.578	27.62
		64M8G7D	QPSK	0.385	25.86	0.566	27.53
		64M7W7D	16QAM	0.307	24.87	0.460	26.63
		64M6W7D	64QAM	0.238	23.77	0.363	25.60
Sub6 n77(78) (80)	3740.01 – 3939.99	77M3G7D	PI/2 BPSK	0.390	25.91	0.575	27.60
		77M4G7D	QPSK	0.380	25.80	0.565	27.52
		77M5W7D	16QAM	0.310	24.91	0.468	26.70
		77M5W7D	64QAM	0.238	23.77	0.366	25.64
Sub6 n77(78) (90)	3745.02 – 3934.98	87M0G7D	PI/2 BPSK	0.394	25.95	0.638	28.05
		87M3G7D	QPSK	0.381	25.81	0.637	28.04
		86M8W7D	16QAM	0.318	25.02	0.500	26.99
		87M2W7D	64QAM	0.215	23.33	0.353	25.48
Sub6 n77(78) (100)	3750.00 – 3930.00	96M6G7D	PI/2 BPSK	0.372	25.70	0.662	28.21
		96M8G7D	QPSK	0.366	25.64	0.644	28.09
		96M9W7D	16QAM	0.297	24.73	0.516	27.13
		96M6W7D	64QAM	0.209	23.20	0.374	25.73

3. 3700 MHz - 3980 MHz_MIMO

Mode (MHz)	Tx Frequency (MHz)	Modulation	EIRP External Antenna		EIRP Internal Antenna	
			Max. Power (W)	Max. Power (W)	Max. Power (W)	Max. Power (dBm)
Sub6 n77(78) (20)	3710.01 – 3969.99	QPSK	0.527	27.22	0.796	29.01
		16QAM	0.429	26.32	0.746	28.73
		64QAM	0.333	25.23	0.511	27.08
Sub6 n77(78) (30)	3715.02 – 3964.98	QPSK	0.491	26.91	0.796	29.01
		16QAM	0.448	26.51	0.789	28.97
		64QAM	0.295	24.70	0.495	26.95
Sub6 n77(78) (40)	3720.00 – 3960.00	QPSK	0.486	26.87	0.865	29.37
		16QAM	0.447	26.50	0.818	29.13
		64QAM	0.314	24.97	0.499	26.98
Sub6 n77(78) (50)	3725.10 – 3954.99	QPSK	0.481	26.82	0.802	29.04
		16QAM	0.431	26.34	0.746	28.73
		64QAM	0.439	26.42	0.528	27.23
Sub6 n77(78) (60)	3730.02 – 3949.98	QPSK	0.501	27.00	0.887	29.48
		16QAM	0.439	26.42	0.743	28.71
		64QAM	0.290	24.62	0.511	27.08
Sub6 n77(78) (70)	3735.00 – 3945.00	QPSK	0.452	26.55	0.839	29.24
		16QAM	0.439	26.42	0.738	28.68
		64QAM	0.282	24.50	0.511	27.08
Sub6 n77(78) (80)	3740.01 – 3939.99	QPSK	0.439	26.42	0.861	29.35
		16QAM	0.381	25.81	0.847	29.28
		64QAM	0.248	23.94	0.537	27.30
Sub6 n77(78) (90)	3745.02 – 3934.98	QPSK	0.408	26.11	0.818	29.13
		16QAM	0.378	25.78	0.713	28.53
		64QAM	0.236	23.73	0.485	26.86
Sub6 n77(78) (100)	3750.00 – 3930.00	QPSK	0.378	25.78	0.859	29.34
		16QAM	0.356	25.51	0.828	29.18
		64QAM	0.242	23.83	0.524	27.19

2. INTRODUCTION

2.1. DESCRIPTION OF EUT

The EUT was a GM Onstar Gen12 ROW with GSM/GPRS/EGPRS/UMTS and LTE, Sub6.

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

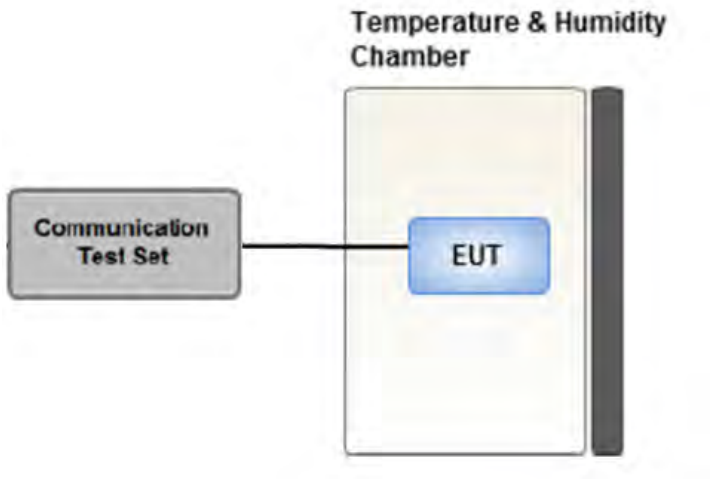
The Fully-anechoic chamber and conducted measurement facility used to collect the radiated data are located at the **74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, 17383, Rep. of KOREA.**

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	- KDB 971168 D01 v03r01 – Section 5.2
Peak- to- Average Ratio	- KDB 971168 D01 v03r01 – Section 5.7 - ANSI C63.26-2015 – Section 5.2.3.4 - ANSI C63.26-2015 – Section 5.2.6(only GSM)
Frequency stability	- ANSI C63.26-2015 – Section 5.6
Effective Radiated Power/ Effective Isotropic Radiated Power	- KDB 971168 D01 v03r01 – Section 5.2 & 5.8 - ANSI/TIA-603-E-2016 – Section 2.2.17
Radiated Spurious and Harmonic Emissions	- KDB 971168 D01 v03r01 – Section 6.2 - ANSI/TIA-603-E-2016 – Section 2.2.12

3.2 CONDUCTED OUTPUT POWER



Test setup

Test Overview

When an average power meter is used to perform RF output power measurements, the fundamental condition that measurements be performed only over durations of active transmissions at maximum output power level applies.

Conducted Output Power was tested in accordance with KDB971168 D01 Power Meas License Digital Systems v03r01, Section 5.2.

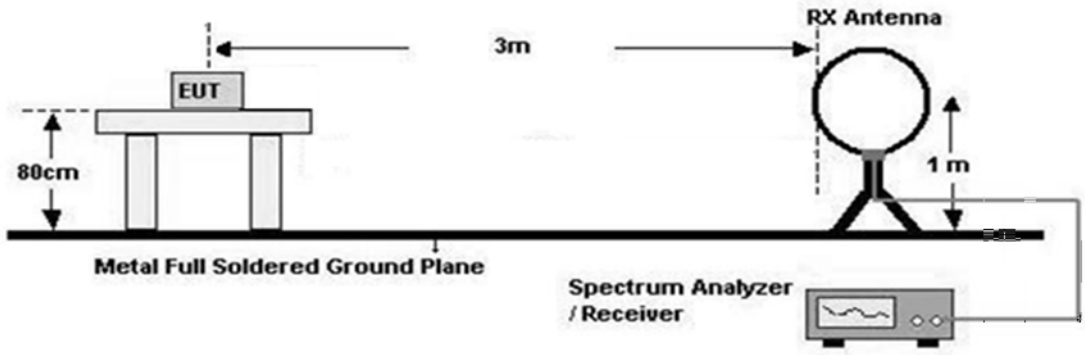
3.3 RADIATED TEST

Test Overview

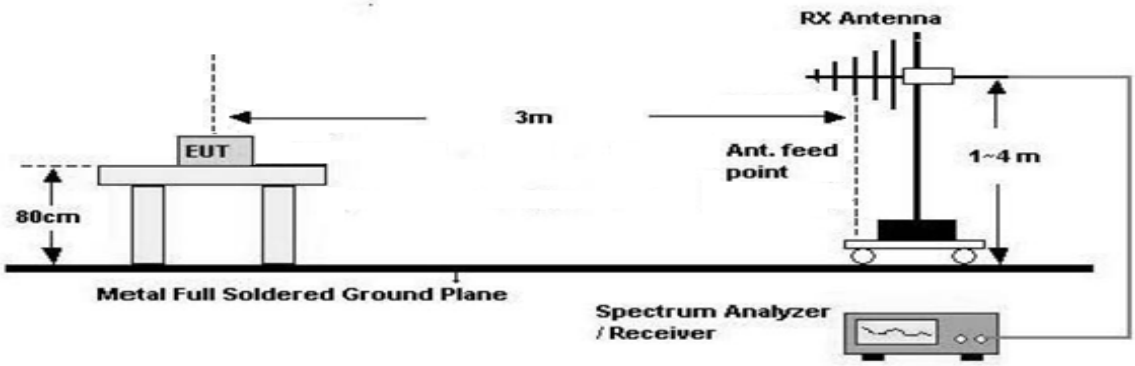
Radiated tests are performed in the semi-anechoic chamber. The equipment under test is placed on a non-conductive table on semi-anechoic chamber.

Test Configuration

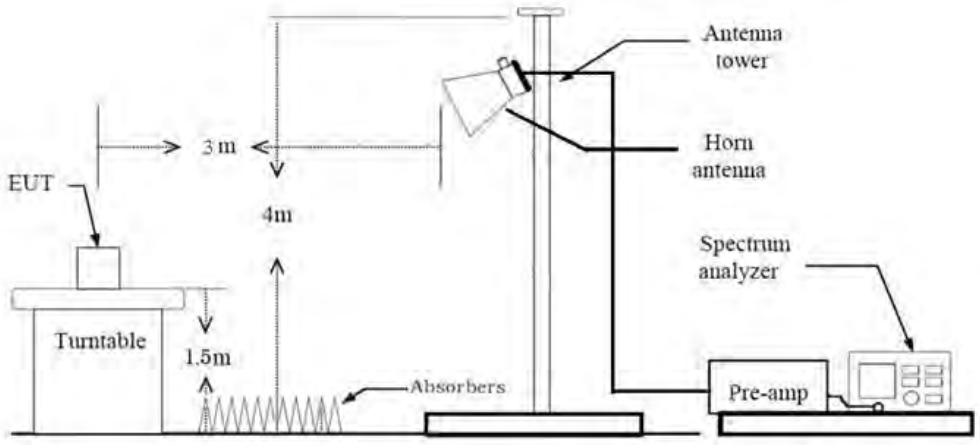
Below 30 MHz



30 MHz - 1 GHz



Above 1 GHz



3.3.1 RADIATED POWER

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 ≥ 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 EUT is placed on a turntable, which is 0.8 m above ground plane. (Below 1 GHz)
2. The EUT is placed on a turntable, which is 1.5 m above ground plane. (Above 1 GHz)
3. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
4. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
5. EUT is set 3 m away from the receiving antenna, which is varied from 1 m to 4 m to find out the highest emissions.
6. 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.
7. Total(dB V/m) = Measured Value(dB V) + Cable Loss(dB) + Antenna Factor(dB/m) + Distance Factor(D.F)
8. EIRP (dBm)
   = Total (dBμ V/m) + 20 log D – 104.8 (where D is the measurement distance in meters. D=3)
   = Total (dB V/m) - 95.2(dB)
9. ERP(dBm) = EIRP(dBm) - 2.15(dB)

3.3.2 RADIATED SPURIOUS EMISSIONS

Test Settings

1. RBW = 100 kHz for emissions below 1 GHz and 1 MHz for emissions above 1 GHz
2. VBW ≥ 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. 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
2. 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.

Below 30 MHz

1. The loop antenna was placed at a location 3 m from the EUT
2. The EUT is placed on a turntable, which is 0.8 m above ground plane.
3. We have done x, y, z planes in EUT and horizontal and vertical polarization and Parallel to the ground plane in detecting antenna.
4. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
5. Distance Correction Factor(0.009 MHz – 0.490 MHz) = 40log(3 m/300 m) = - 80 dB
   Measurement Distance : 3 m
6. Distance Correction Factor(0.490 MHz – 30 MHz) = 40log(3 m/30 m) = - 40 dB
   Measurement Distance : 3 m
7. Total = Measured Value + Antenna Factor(A.F) + Cable Loss(C.L) + Distance Factor(D.F)
8. EIRP (dBm)
   = Total (dBμ V/m) + 20 log D – 104.8 (where D is the measurement distance in meters. D=3)
   = Total (dB V/m) - 95.2(dB)
9. ERP(dBm) = EIRP(dBm) - 2.15(dB)

KDB 414788 OFS and Chamber Correlation Justification

Base on FCC 15.31 (f) (2): measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field.

OFS and chamber correlation testing had been performed and chamber measured test result is the worst case test result.

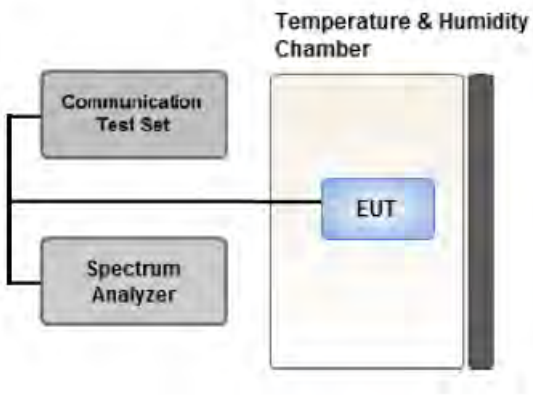
Below 1 GHz

1. The EUT is placed on a turntable, which is 0.8 m above ground plane.
2. The Hybrid antenna was placed at a location 3 m from the EUT, which is varied from 1 m to 4 m to find out the highest emissions.
3. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
4. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
5. Total = Measured Value + Antenna Factor(A.F) + Cable Loss(C.L)
7. Total(dB V/m) = Measured Value(dB V) + Cable Loss(dB) + Antenna Factor(dB/m) + Distance Factor(D.F)
8. EIRP (dBm)
   = Total (dBμ V/m) + 20 log D – 104.8 (where D is the measurement distance in meters. D=3)
   = Total (dB V/m) - 95.2(dB)
9. ERP(dBm) = EIRP(dBm) - 2.15(dB)

Above 1 GHz

1. The EUT is placed on a turntable, which is 1.5 m above ground plane.
2. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
3. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
4. EUT is set 3 m away from the receiving antenna, which is varied from 1 m to 4 m to find out the highest emissions.
5. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
6. Each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
7. Total(dB V/m) = Measured Value(dB V) + Cable Loss(dB) + Antenna Factor(dB/m) + Distance Factor(D.F) + H.P.F(dB) - Amp Gain(dB)
8. EIRP (dBm)
   = Total (dBμ V/m) + 20 log D – 104.8 (where D is the measurement distance in meters. D=3)
   = Total (dB V/m) - 95.2(dB)

3.4 PEAK- TO- AVERAGE RATIO



Test setup

① CCDF Procedure for PAPR

Test Settings

1. Set resolution/measurement bandwidth ≥ 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 %.

② Alternate Procedure for PAPR

Use one of the procedures presented in 5.2(ANSI C63.26-2015) to measure the total peak power and record as as P_{Pk}.

Use one of the applicable procedures presented 5.2(ANSI C63.26-2015) to measure the total average power and record as P_{Avg}. Determine the P.A.R. from:

$$P.A.R_{(dB)} = P_{Pk(dBm)} - P_{Avg(dBm)} \quad (P_{Avg} = \text{Average Power} + \text{Duty cycle Factor})$$

Test Settings(Peak Power)

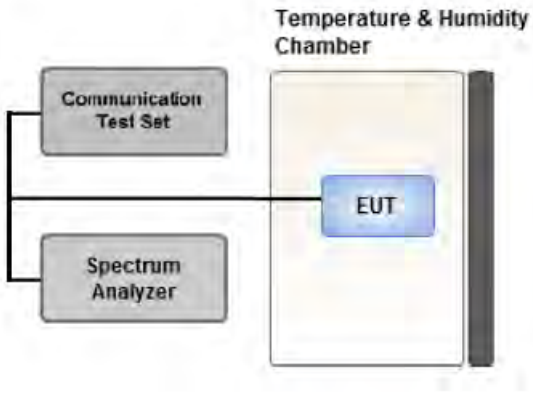
The measurement instrument must have a RBW that is greater than or equal to the OBW of the signal to be measured and a VBW ≥ 3 × RBW.

1. Set the RBW ≥ OBW.
2. Set VBW ≥ 3 × RBW.
3. Set span ≥ 2 × OBW.
4. Sweep time ≥ 10 × (number of points in sweep) × (transmission symbol period).
5. Detector = peak.
6. Trace mode = max hold.
7. Allow trace to fully stabilize.
8. Use the peak marker function to determine the peak amplitude level.

Test Settings(Average Power)

1. Set span to 2 × to 3 × the OBW.
2. Set RBW ≥ OBW.
3. Set VBW ≥ 3 × RBW.
4. Set number of measurement points in sweep ≥ 2 × span / RBW.
5. Sweep time:
   Set ≥ [10 × (number of points in sweep) × (transmission period)] for single sweep (automation-compatible) measurement. The transmission period is the (on + off) time.
6. Detector = power averaging (rms).
7. Set sweep trigger to “free run.”
8. Trace average at least 100 traces in power averaging (rms) mode if sweep is set to auto-couple. (To accurately determine the average power over the on and off period of the transmitter, it can be necessary to increase the number of traces to be averaged above 100 or, if using a manually configured sweep time, increase the sweep time.)
9. Use the peak marker function to determine the maximum amplitude level.
10. Add [10 log (1/duty cycle)] to the measured maximum power level to compute the average power during continuous transmission. For example, add [10 log (1/0.25)] = 6 dB if the duty cycle is a constant 25 %.

3.5 OCCUPIED BANDWIDTH



Test setup

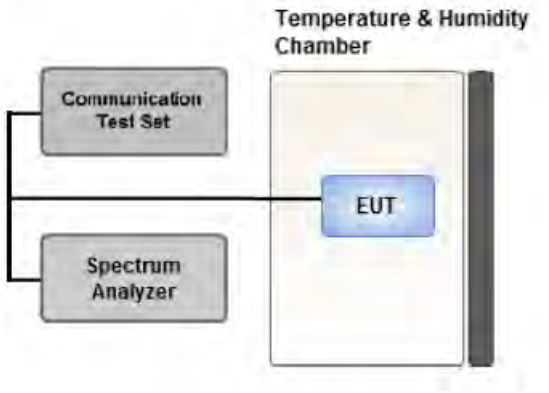
The width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5 % of the total mean power of a given emission.

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 ≥ 3 x RBW
4. Detector = Peak
5. Trace mode = max hold
6. Sweep = auto couple
7. The trace was allowed to stabilize
8. If necessary, steps 2 – 7 were repeated after changing the RBW such that it would be within 1 – 5 % of the 99 % occupied bandwidth observed in Step 7

3.6 SPURIOUS AND HARMONIC EMISSIONS AT ANTENNA TERMINAL



Test setup

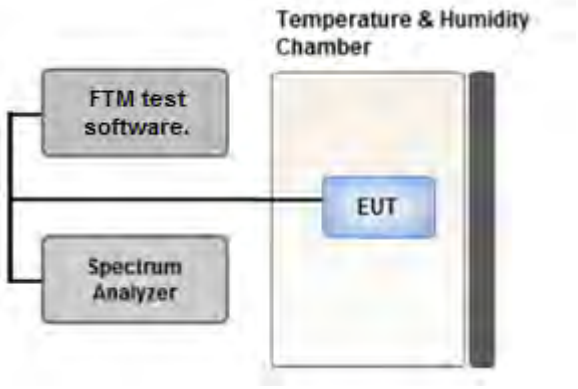
Test Overview

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 ≥ 3 MHz
3. Detector = RMS
4. Trace Mode = Average
5. Sweep time = auto
6. Number of points in sweep ≥ 2 x Span / 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 ≥ 2 x Span/RBW
7. Trace mode = trace average
8. Sweep time = auto couple
9. The trace was allowed to stabilize

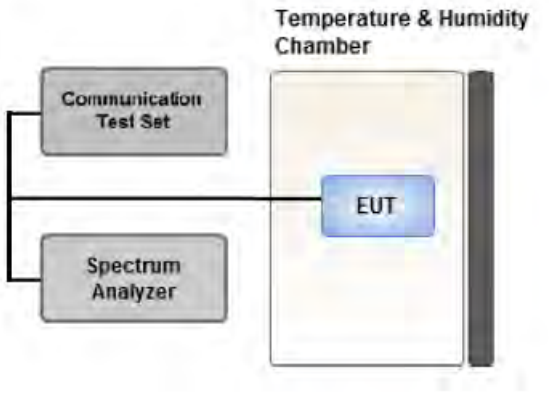
Test Notes

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 Margin < 1 dB the emission level is either corrected by 10 log(1 MHz/ 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.
- All modes of operation were investigated and the worst case configuration results are reported.

  Mode : SA, NSA

  Worst case : SA

  Mode : Internal Antenna, External Antenna (ANT 5, ANT 4, DUT 4)

  Worst case : Internal Antenna, External Antenna (ANT 5)
- The worst case is reported with the EUT positioning, modulations, and paging service configurations shown in the test data.
- 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.

  (External Antenna_SISO Worst case : 90 MHz (3450 MHz - 3550 MHz), 60 MHz (3700 MHz - 3980 MHz))

  (External Antenna_MIMO Worst case : 20 MHz (3450 MHz - 3550 MHz), 20 MHz (3700 MHz - 3980 MHz))

  (Internal Antenna_SISO Worst case : 40 MHz (3450 MHz - 3550 MHz), 100 MHz (3700 MHz - 3980 MHz))

  (Internal Antenna_MIMO Worst case : 60 MHz (3450 MHz - 3550 MHz), 60 MHz (3700 MHz - 3980 MHz))
- TFGMEIBBCD4 & additional models were tested and the worst case results are reported.

  (Worst case : TFGMEIBBCD4)

[External Antenna_SISO 3450 MHz - 3550 MHz Worst case]

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

[External Antenna_MIMO 3450 MHz - 3550 MHz Worst case]

Test Description	Modulation	RB size	RB offset	Axis
Effective Isotropic Radiated Power	QPSK, 16QAM, 64QAM	See Section 8.1		Only X
Radiated Spurious and Harmonic Emissions	QPSK	See Section 8.2		Only X

[External Antenna_SISO 3700 MHz - 3980 MHz Worst case]

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

[External Antenna_MIMO 3700 MHz - 3980 MHz Worst case]

Test Description	Modulation	RB size	RB offset	Axis
Effective Isotropic Radiated Power	QPSK, 16QAM, 64QAM	See Section 9.1		Only X
Radiated Spurious and Harmonic Emissions	QPSK	See Section 9.2		Only X

[Internal Antenna_SISO 3450 MHz - 3550 MHz Worst case]

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

[Internal Antenna_MIMO 3450 MHz - 3550 MHz Worst case]

Test Description	Modulation	RB size	RB offset	Axis
Effective Isotropic Radiated Power	QPSK, 16QAM, 64QAM	See Section 8.1		Y
Radiated Spurious and Harmonic Emissions	QPSK	See Section 8.2		Y

[Internal Antenna_SISO 3700 MHz - 3980 MHz Worst case]

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

[Internal Antenna_MIMO 3700 MHz - 3980 MHz Worst case]

Test Description	Modulation	RB size	RB offset	Axis
Effective Isotropic Radiated Power	QPSK, 16QAM, 64QAM	See Section 9.1		Y
Radiated Spurious and Harmonic Emissions	QPSK	See Section 9.2		Y

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)
- All modes of operation were investigated and the worst case configuration results are reported.
  Mode: SA, NSA
  Worst case: SA
- All modes of operation were investigated and the worst case configuration results are reported.
- TFGMEIBBCD4 & additional models were tested and the worst case results are reported.
  (Worst case : TFGMEIBBCD4)

[Worst case_SISO]

Test Description	Modulation	Bandwidth (MHz)	Frequency	RB size	RB offset
Occupied Bandwidth,	PI/2 BPSK, QPSK, 16QAM, 64QAM	20, 30, 40, 50, 60, 70, 80, 90, 100	Mid	Full RB	0
Peak-To-Average Ratio	PI/2 BPSK, QPSK, 16QAM, 64QAM	20, 30, 40, 50, 60, 70, 80, 90, 100	Mid	Full RB	0
Band Edge	PI/2 BPSK	20	Low	1	0
			High	1	50
		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
		20, 30, 40, 50, 60, 70, 80, 90, 100	Low, High	Full RB	0
Spurious and Harmonic Emissions at Antenna Terminal	PI/2 BPSK	20, 30, 40, 50, 60, 70, 80, 90, 100	Low, Mid, High	1	1

4. LIST OF TEST EQUIPMENT

Equipment	Model	Manufacturer	Serial No.	Due to Calibration	Calibration Interval
Antenna Position Tower	MA4640/800-XP-ET	Innco systems	N/A	N/A	N/A
Turn Table	DS2000-S	Innco systems	N/A	N/A	N/A
Turn Table	Turn Table	Ets	N/A	N/A	N/A
Controller (Antenna mast & Turn Table)	CO3000	Innco systems	CO3000/1251/489 20320/P	N/A	N/A
Amp & Filter Bank Switch Controller	FBSM-01B	TNM system	TM20090002	N/A	N/A
RF Switch System	TMX0132C	TNM System	TM21100002	N/A	N/A
RF Switch System	FBSR-04C(3G HPF+LNA)	TNM System	S4L1	08/18/2024	Annual
RF Switch System	FBSR-04C(LNA)	TNM System	S4L4	08/18/2024	Annual
RF Switch System	FBSR-04C(Thru)	TNM System	S4L6	08/18/2024	Annual
HIGHPASS FILTER	WHKX10-900-1000-15000-40SS	WAINWRIGHT INSTRUMENTS	16	08/01/2024	Annual
HIGHPASS FILTER	WHNX6.0/26.5G-6SS	WAINWRIGHT INSTRUMENTS	1	01/19/2024	Annual
Power Amplifier	CBL18265035	CERNEX	22966	12/01/2023	Annual
Power Amplifier	CBL26405040	CERNEX	25956	03/02/2024	Annual
Loop Antenna(9 kHz ~ 30 MHz)	FMZB1513	Schwarzbeck	1513-333	03/17/2024	Biennial
Horn Antenna(1 ~ 18 GHz)	BBHA 9120	Schwarzbeck	937	02/13/2025	Biennial
Horn Antenna(15 ~ 40 GHz)	BBHA 9170	Schwarzbeck	BBHA9170342	09/29/2024	Biennial
Bilog Antenna	VULB9160	Schwarzbeck	3150	03/09/2025	Biennial
Hybrid Antenna	VULB9160	Schwarzbeck	760	02/24/2025	Biennial
Trilog Broadband Antenna	VULB 9168	Schwarzbeck	895	08/16/2024	Biennial
Chamber	SU-642	ESPEC	93008124	02/22/2024	Annual
Power Splitter(DC~26.5 GHz)	11667B	Hewlett Packard	11275	03/02/2024	Annual
DC Power Supply	E3632A	Agilent	MY40010147	06/23/2024	Annual
4-Way Divider	ZC4PD-K1844+	Mini-Circuits	942907	09/27/2023	Annual
ATTENUATOR(20 dB)	8493C	Hewlett Packard	17280	04/19/2024	Annual
Spectrum Analyzer(10 Hz ~ 40 GHz)	FSV40	REOHDE & SCHWARZ	101436	02/22/2024	Annual
Base Station	8960 (E5515C)	Agilent	MY48360800	08/10/2024	Annual
Wideband Radio Communication Tester	MT8821C	Anritsu Corp.	6262287701	05/22/2024	Annual
Wideband Radio Communication Tester	MT8000A	Anritsu Corp.	6262302511	05/23/2024	Annual
SIGNAL GENERATOR (100 kHz ~ 40 GHz)	SMB100A	REOHDE & SCHWARZ	177633	06/22/2024	Annual

Signal Analyzer(10 Hz ~ 26.5 GHz)	N9020A	Agilent	MY52090906	04/20/2024	Annual
Signal Analyzer(5 Hz ~ 40.0 GHz)	N9030B	KEYSIGHT	MY55480167	05/24/2024	Annual
FCC LTE Mobile Conducted RF Automation Test Software	-	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. Espectially, 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 (±dB)
Conducted Disturbance (150 kHz ~ 30 MHz)	1.90 (Confidence level about 95 %, k=2)
Radiated Disturbance (9 kHz ~ 30 MHz)	4.14 (Confidence level about 95 %, k=2)
Radiated Disturbance (30 MHz ~ 1 GHz)	5.82 (Confidence level about 95 %, k=2)
Radiated Disturbance (1 GHz ~ 18 GHz)	5.74 (Confidence level about 95 %, k=2)
Radiated Disturbance (18 GHz ~ 40 GHz)	5.76 (Confidence level about 95 %, k=2)
Radiated Disturbance (Above 40 GHz)	5.52 (Confidence level about 95 %, k=2)

6. SUMMARY OF TEST RESULTS

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	PASS
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

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

7. 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 (3450 MHz - 3550 MHz)

8.1 Conducted Output Power

8.1.1 SISO

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						630668	633334	636000
						3460.02 MHz	3500.01 MHz	3540 MHz
20MHz	30	DFT-s	pi/2 BPSK	1	1	25.71	25.21	25.39
				1	26	25.65	25.07	25.38
				1	49	25.54	25.15	25.52
				25	0	25.02	24.50	24.88
				25	13	25.48	24.93	25.32
				25	26	24.99	24.52	25.05
				50	0	25.20	24.49	24.99
			QPSK	1	1	25.45	25.09	25.34
			16QAM	1	1	24.49	24.15	24.41
			64QAM	1	1	23.35	22.77	23.01
		CP	QPSK	1	1	24.00	23.63	23.75

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						631000	633334	635666
						3465 MHz	3500.01 MHz	3534.99 MHz
30MHz	30	DFT-s	pi/2 BPSK	1	1	25.36	25.24	25.07
				1	39	25.32	24.98	25.28
				1	76	25.24	25.10	25.53
				36	0	24.84	24.65	24.67
				36	21	25.29	25.04	25.29
				36	42	24.75	24.58	24.99
				75	0	25.06	24.57	24.79
			QPSK	1	1	25.28	25.21	25.02
			16QAM	1	1	24.50	24.22	24.06
			64QAM	1	1	22.91	22.81	22.67
		CP	QPSK	1	1	23.75	23.60	23.54

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						631334	633334	635332
						3470.01 MHz	3500.01 MHz	3529.98 MHz
40MHz	30	DFT-s	pi/2 BPSK	1	1	25.45	25.37	25.05
				1	53	25.41	25.05	25.28
				1	104	25.31	25.27	25.68
				50	0	24.89	24.72	24.61
				50	28	25.25	25.10	25.27
				50	56	24.54	24.66	24.98
				100	0	24.88	24.59	24.80
			QPSK	1	1	25.40	25.29	25.01
			16QAM	1	1	24.45	24.26	24.09
			64QAM	1	1	23.17	22.98	22.67
		CP	QPSK	1	1	23.65	23.34	23.47

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						631668	633334	635000
						3475.02 MHz	3500.01 MHz	3525 MHz
50MHz	30	DFT-s	pi/2 BPSK	1	1	25.58	25.42	25.00
				1	66	25.33	25.06	25.14
				1	131	25.04	25.23	25.48
				64	0	24.81	24.73	24.60
				64	35	25.17	25.16	25.22
				64	69	24.61	24.67	24.83
				128	0	24.88	24.73	24.68
			QPSK	1	1	25.49	25.34	24.95
			16QAM	1	1	24.51	24.27	24.07
			64QAM	1	1	23.20	22.90	22.65
		CP	QPSK	1	1	23.93	23.68	23.54

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						632000	633334	634666
						3480 MHz	3500.01 MHz	3519.99 MHz
60MHz	30	DFT-s	pi/2 BPSK	1	1	25.63	25.52	25.12
				1	81	25.48	25.21	25.23
				1	160	25.10	25.36	25.59
				81	0	24.88	24.82	24.64
				81	41	25.33	25.19	25.24
				81	81	24.66	24.71	24.92
				162	0	24.88	24.82	24.78
			QPSK	1	1	25.54	25.46	25.10
			16QAM	1	1	24.60	24.49	24.26
			64QAM	1	1	23.23	23.14	22.78
		CP	QPSK	1	1	23.89	23.75	23.66

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						632334	633334	634332
						3485.01 MHz	3500.01 MHz	3514.98 MHz
70MHz	30	DFT-s	pi/2 BPSK	1	1	25.69	25.41	25.25
				1	94	25.25	25.18	25.17
				1	187	25.07	25.40	25.64
				90	0	24.94	24.87	24.61
				90	45	25.26	25.28	25.23
				90	99	24.65	24.77	24.98
				180	0	24.75	24.85	24.76
			QPSK	1	1	25.63	25.33	25.17
			16QAM	1	1	24.77	24.62	24.70
			64QAM	1	1	23.33	23.23	22.86
		CP	QPSK	1	1	23.94	23.85	23.40

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						632668	633334	634000
						3490.02 MHz	3500.01 MHz	3510 MHz
80MHz	30	DFT-s	pi/2 BPSK	1	1	25.74	25.60	25.46
				1	109	25.18	25.09	25.11
				1	215	25.28	25.40	25.57
				108	0	25.05	24.89	24.74
				108	55	25.24	25.19	25.19
				108	109	24.65	24.73	24.82
				216	0	24.84	24.80	24.81
			QPSK	1	1	25.56	25.58	25.41
			16QAM	1	1	24.58	24.65	24.39
			64QAM	1	1	23.37	23.27	23.17
		CP	QPSK	1	1	24.18	24.13	23.97

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						633000	633334	633666
						3495 MHz	3500.01 MHz	3504.99 MHz
90MHz	30	DFT-s	pi/2 BPSK	1	1	25.57	25.57	25.48
				1	122	25.00	25.08	25.00
				1	243	25.34	25.47	25.60
				125	0	24.91	24.86	24.74
				125	60	24.58	24.69	24.59
				125	120	24.58	24.77	24.76
				243	0	24.61	24.72	24.74
			QPSK	1	1	25.51	25.53	25.46
			16QAM	1	1	24.54	24.70	24.58
			64QAM	1	1	23.00	23.18	22.97
		CP	QPSK	1	1	24.11	24.02	23.88

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)
						633334
						3500.01 MHz
100MHz	30	DFT-s	pi/2 BPSK	1	1	25.51
				1	137	24.98
				1	271	25.50
				135	0	24.84
				135	69	25.10
				135	138	24.69
				270	0	24.79
			QPSK	1	1	25.42
			16QAM	1	1	24.62
			64QAM	1	1	23.08
		CP	QPSK	1	1	23.89

8.1.2 MIMO

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						630668	633334	636000
						3460.02 MHz	3500.01 MHz	3540 MHz
20MHz	30	CP	QPSK	1	1	24.60	24.47	24.37
				1	26	24.48	24.22	24.25
				1	49	24.45	24.26	24.40
				25	0	23.05	22.86	22.80
				25	13	24.48	24.35	24.30
				25	26	22.92	22.80	22.85
				51	0	23.04	22.83	22.87
			16QAM	1	1	24.19	24.07	23.97
			64QAM	1	1	22.39	22.33	22.30

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						631000	633334	635666
						3465 MHz	3500.01 MHz	3534.99 MHz
30MHz	30	CP	QPSK	1	1	24.45	24.38	24.30
				1	39	24.38	24.25	24.37
				1	76	24.42	24.35	24.53
				36	0	22.93	22.84	22.86
				36	21	24.33	24.26	24.30
				36	42	22.92	22.90	22.99
				78	0	22.96	22.90	22.95
			16QAM	1	1	23.91	24.10	23.90
			64QAM	1	1	22.30	22.35	22.12

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						631334	633334	635332
						3470.01 MHz	3500.01 MHz	3529.98 MHz
40MHz	30	CP	QPSK	1	1	24.46	24.46	24.27
				1	53	24.47	24.29	24.30
				1	104	24.48	24.32	24.52
				50	0	22.98	22.90	22.72
				50	28	24.38	24.25	24.27
				50	56	23.04	22.94	22.91
				106	0	22.92	22.91	22.83
			16QAM	1	1	24.00	23.93	23.89
			64QAM	1	1	22.34	22.31	22.20

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						631668	633334	635000
						3475.02 MHz	3500.01 MHz	3525 MHz
50MHz	30	CP	QPSK	1	1	24.28	24.32	24.24
				1	66	24.30	24.20	24.14
				1	131	24.18	24.28	24.29
				64	0	22.83	22.87	22.60
				64	35	24.21	24.15	24.04
				64	69	22.77	22.72	22.66
				133	0	22.80	22.63	22.63
			16QAM	1	1	23.88	23.96	23.74
			64QAM	1	1	22.25	22.27	22.00

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						632000	633334	634666
						3480 MHz	3500.01 MHz	3519.99 MHz
60MHz	30	CP	QPSK	1	1	24.35	24.42	24.32
				1	81	24.41	24.29	24.30
				1	160	24.35	24.37	24.49
				81	0	22.84	22.87	22.70
				81	41	24.31	24.23	24.13
				81	81	22.84	22.71	22.86
				162	0	22.89	22.80	22.78
			16QAM	1	1	23.90	23.93	23.90
			64QAM	1	1	22.40	22.38	22.18

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						632334	633334	634332
						3485.01 MHz	3500.01 MHz	3514.98 MHz
70MHz	30	CP	QPSK	1	1	24.36	24.47	24.33
				1	94	24.29	24.22	24.26
				1	187	24.01	24.25	24.43
				90	0	22.95	22.90	22.73
				90	45	24.32	24.30	24.24
				90	99	22.64	22.27	22.87
				189	0	22.75	22.77	22.80
			16QAM	1	1	23.95	24.12	23.98
			64QAM	1	1	22.33	22.39	22.19

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						632668	633334	634000
						3490.02 MHz	3500.01 MHz	3510 MHz
80MHz	30	CP	QPSK	1	1	24.34	24.40	24.40
				1	109	24.25	24.22	24.13
				1	215	24.15	24.18	24.29
				108	0	22.83	22.83	22.70
				108	55	24.29	24.27	24.20
				108	109	22.70	22.75	22.72
				217	0	22.74	22.81	22.77
			16QAM	1	1	24.02	24.09	23.96
			64QAM	1	1	22.28	22.39	22.28

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						633000	633334	633666
						3495 MHz	3500.01 MHz	3504.99 MHz
90MHz	30	CP	QPSK	1	1	24.45	24.46	24.42
				1	122	24.19	24.23	24.20
				1	243	24.30	24.42	24.45
				125	0	22.82	22.84	22.87
				125	60	22.84	22.89	22.85
				125	120	22.58	22.77	22.77
				245	0	22.71	22.86	22.83
			16QAM	1	1	24.03	23.93	24.03
			64QAM	1	1	22.47	22.42	22.42

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)
						633334
						3500.01 MHz
100MHz	30	CP	QPSK	1	1	24.43
				1	137	24.30
				1	271	24.57
				135	0	22.94
				135	69	24.26
				135	138	22.85
				273	0	22.90
			16QAM	1	1	24.01
			64QAM	1	1	22.32

8.2 EQUIVALENT ISOTROPIC RADIATED POWER

8.2.1 External Antenna_SISO

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBµV)	A.F+C.L+D.F (dB/m)	Total (dBµV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3460.02	Sub6 n77(78)/ 20 MHz [30 kHz]	PI/2 BPSK	84.09	37.86	121.95	V	< 1.00	0.473	26.75	1	49
		QPSK	83.88	37.86	121.74	V		0.451	26.54		
		16-QAM	82.99	37.86	120.85	V		0.367	25.65		
		64-QAM	82.33	37.86	120.19	V		0.316	24.99		
3500.01		PI/2 BPSK	83.66	37.99	121.65	V		0.442	26.45	1	25
		QPSK	83.59	37.99	121.58	V		0.435	26.38		
		16-QAM	82.65	37.99	120.64	V		0.350	25.44		
		64-QAM	81.44	37.99	119.43	V		0.265	24.23		
3540.00		PI/2 BPSK	81.05	38.33	119.38	V		0.262	24.18	1	1
		QPSK	81.04	38.33	119.37	V		0.261	24.17		
		16-QAM	79.89	38.33	118.22	V		0.200	23.02		
		64-QAM	79.19	38.33	117.52	V		0.170	22.32		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBµV)	A.F+C.L+D.F (dB/m)	Total (dBµV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3465.00	Sub6 n77(78)/ 30 MHz [30 kHz]	PI/2 BPSK	84.19	37.87	122.06	V	< 1.00	0.485	26.86	1	1
		QPSK	84.16	37.87	122.03	V		0.482	26.83		
		16-QAM	83.04	37.87	120.91	V		0.372	25.71		
		64-QAM	81.45	37.87	119.32	V		0.258	24.12		
3500.01		PI/2 BPSK	83.56	37.99	121.55	V		0.432	26.35	1	39
		QPSK	83.51	37.99	121.50	V		0.427	26.30		
		16-QAM	82.45	37.99	120.44	V		0.335	25.24		
		64-QAM	80.77	37.99	118.76	V		0.227	23.56		
3534.99		PI/2 BPSK	81.62	38.24	119.86	V		0.292	24.66	1	1
		QPSK	81.48	38.24	119.72	V		0.283	24.52		
		16-QAM	80.44	38.24	118.68	V		0.223	23.48		
		64-QAM	78.77	38.24	117.01	V		0.152	21.81		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3470.01	Sub6 n77(78)/ 40 MHz [30 kHz]	PI/2 BPSK	84.05	37.97	122.02	V	< 1.00	0.481	26.82	1	1
		QPSK	83.88	37.97	121.85	V		0.462	26.65		
		16-QAM	83.02	37.97	120.99	V		0.379	25.79		
		64-QAM	82.23	37.97	120.20	V		0.316	25.00		
3500.01		PI/2 BPSK	83.53	37.99	121.52	V		0.429	26.32	1	53
		QPSK	83.40	37.99	121.39	V		0.416	26.19		
		16-QAM	82.48	37.99	120.47	V		0.337	25.27		
		64-QAM	81.19	37.99	119.18	V		0.250	23.98		
3529.98		PI/2 BPSK	82.71	38.12	120.83	V		0.366	25.63	1	1
		QPSK	82.59	38.12	120.71	V		0.356	25.51		
		16-QAM	81.71	38.12	119.83	V		0.291	24.63		
		64-QAM	80.86	38.12	118.98	V		0.239	23.78		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3475.02	Sub6 n77(78)/ 50 MHz [30 kHz]	PI/2 BPSK	84.19	37.85	122.04	V	< 1.00	0.483	26.84	1	1
		QPSK	84.01	37.85	121.86	V		0.463	26.66		
		16-QAM	83.17	37.85	121.02	V		0.382	25.82		
		64-QAM	81.94	37.85	119.79	V		0.288	24.59		
3500.01		PI/2 BPSK	83.42	37.99	121.41	V		0.418	26.21	1	1
		QPSK	83.28	37.99	121.27	V		0.405	26.07		
		16-QAM	82.32	37.99	120.31	V		0.324	25.11		
		64-QAM	81.25	37.99	119.24	V		0.254	24.04		
3525.00		PI/2 BPSK	83.25	38.03	121.28	V		0.405	26.08	1	1
		QPSK	83.11	38.03	121.14	V		0.392	25.94		
		16-QAM	82.19	38.03	120.22	V		0.317	25.02		
		64-QAM	81.03	38.03	119.06	V		0.243	23.86		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3480.00	Sub6 n77(78)/ 60 MHz [30 kHz]	PI/2 BPSK	84.04	37.83	121.87	V	< 1.00	0.465	26.67	1	1
		QPSK	83.90	37.83	121.73	V		0.450	26.53		
		16-QAM	83.09	37.83	120.92	V		0.373	25.72		
		64-QAM	81.84	37.83	119.67	V		0.280	24.47		
3500.01		PI/2 BPSK	83.74	37.99	121.73	V		0.450	26.53	1	1
		QPSK	83.59	37.99	121.58	V		0.435	26.38		
		16-QAM	82.55	37.99	120.54	V		0.342	25.34		
		64-QAM	81.54	37.99	119.53	V		0.271	24.33		
3519.99		PI/2 BPSK	83.35	37.95	121.30	V		0.407	26.10	1	1
		QPSK	83.19	37.95	121.14	V		0.393	25.94		
		16-QAM	82.56	37.95	120.51	V		0.340	25.31		
		64-QAM	81.11	37.95	119.06	V		0.243	23.86		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3485.01	Sub6 n77(78)/ 70 MHz [30 kHz]	PI/2 BPSK	84.12	37.84	121.96	V	< 1.00	0.474	26.76	1	1
		QPSK	83.97	37.84	121.81	V		0.458	26.61		
		16-QAM	83.08	37.84	120.92	V		0.373	25.72		
		64-QAM	81.84	37.84	119.68	V		0.281	24.48		
3500.01		PI/2 BPSK	83.82	37.99	121.81	V		0.459	26.61	1	1
		QPSK	83.59	37.99	121.58	V		0.435	26.38		
		16-QAM	82.67	37.99	120.66	V		0.352	25.46		
		64-QAM	81.55	37.99	119.54	V		0.272	24.34		
3514.98		PI/2 BPSK	83.51	38.24	121.75	V		0.452	26.55	1	1
		QPSK	83.12	38.24	121.36	V		0.413	26.16		
		16-QAM	82.25	38.24	120.49	V		0.338	25.29		
		64-QAM	80.99	38.24	119.23	V		0.253	24.03		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3490.02	Sub6 n77(78)/ 80 MHz [30 kHz]	PI/2 BPSK	84.11	37.81	121.92	V	< 1.00	0.470	26.72	1	1
		QPSK	84.03	37.81	121.84	V		0.461	26.64		
		16-QAM	83.14	37.81	120.95	V		0.376	25.75		
		64-QAM	81.99	37.81	119.80	V		0.288	24.60		
3500.01		PI/2 BPSK	83.74	37.99	121.73	V		0.450	26.53	1	1
		QPSK	83.53	37.99	121.52	V		0.429	26.32		
		16-QAM	82.67	37.99	120.66	V		0.352	25.46		
		64-QAM	81.39	37.99	119.38	V		0.262	24.18		
3510.00		PI/2 BPSK	83.64	38.21	121.85	V		0.462	26.65	1	1
		QPSK	83.59	38.21	121.80	V		0.457	26.60		
		16-QAM	82.74	38.21	120.95	V		0.376	25.75		
		64-QAM	81.58	38.21	119.79	V		0.288	24.59		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3495.00	Sub6 n77(78)/ 90 MHz [30 kHz]	PI/2 BPSK	84.27	37.92	122.19	V	< 1.00	0.500	26.99	1	1
		QPSK	84.24	37.92	122.16	V		0.497	26.96		
		16-QAM	83.01	37.92	120.93	V		0.374	25.73		
		64-QAM	81.60	37.92	119.52	V		0.271	24.32		
3500.01		PI/2 BPSK	84.14	37.99	122.13	V		0.493	26.93	1	1
		QPSK	84.05	37.99	122.04	V		0.484	26.84		
		16-QAM	83.24	37.99	121.23	V		0.401	26.03		
		64-QAM	81.54	37.99	119.53	V		0.271	24.33		
3504.99		PI/2 BPSK	83.86	37.97	121.83	V		0.460	26.63	1	1
		QPSK	83.68	37.97	121.65	V		0.442	26.45		
		16-QAM	82.85	37.97	120.82	V		0.365	25.62		
		64-QAM	81.17	37.97	119.14	V		0.248	23.94		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3500.01	Sub6 n77(78)/ 100 MHz [30 kHz]	PI/2 BPSK	84.14	37.99	122.13	V	< 1.00	0.493	26.93	1	1
		QPSK	84.09	37.99	122.08	V		0.488	26.88		
		16-QAM	83.22	37.99	121.21	V		0.399	26.01		
		64-QAM	81.47	37.99	119.46	V		0.267	24.26		

8.2.2 External Antenna_MIMO

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3460.02	Sub6 n77(78)/ 20 MHz [30 kHz]	QPSK	82.78	37.86	120.64	V	< 1.00	0.350	25.44	1	1
		16-QAM	82.29	37.86	120.15	V		0.312	24.95		
		64-QAM	80.20	37.86	118.06	V		0.193	22.86		
3500.01		QPSK	83.34	37.99	121.33	V		0.410	26.13	1	25
		16-QAM	82.70	37.99	120.69	V		0.354	25.49		
		64-QAM	81.02	37.99	119.01	V		0.240	23.81		
3540.00		QPSK	82.89	38.33	121.22	V		0.400	26.02	1	1
		16-QAM	82.69	38.33	121.02	V		0.382	25.82		
		64-QAM	80.40	38.33	118.73	V		0.225	23.53		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3465.00	Sub6 n77(78)/ 30 MHz [30 kHz]	QPSK	82.29	37.87	120.16	V	< 1.00	0.313	24.96	1	1
		16-QAM	81.52	37.87	119.39	V		0.262	24.19		
		64-QAM	80.39	37.87	118.26	V		0.202	23.06		
3500.01		QPSK	83.29	37.99	121.28	V		0.406	26.08	1	39
		16-QAM	82.51	37.99	120.50	V		0.339	25.30		
		64-QAM	80.68	37.99	118.67	V		0.223	23.47		
3534.99		QPSK	82.55	38.24	120.79	V		0.362	25.59	1	1
		16-QAM	81.44	38.24	119.68	V		0.281	24.48		
		64-QAM	80.49	38.24	118.73	V		0.225	23.53		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3470.01	Sub6 n77(78)/ 40 MHz [30 kHz]	QPSK	82.44	37.97	120.41	V	< 1.00	0.332	25.21	1	1
		16-QAM	81.59	37.97	119.56	V		0.273	24.36		
		64-QAM	80.42	37.97	118.39	V		0.208	23.19		
3500.01		QPSK	83.04	37.99	121.03	V		0.383	25.83	1	53
		16-QAM	82.49	37.99	120.48	V		0.337	25.28		
		64-QAM	80.60	37.99	118.59	V		0.218	23.39		
3529.98		QPSK	81.87	38.12	119.99	V		0.301	24.79	1	1
		16-QAM	81.67	38.12	119.79	V		0.288	24.59		
		64-QAM	79.59	38.12	117.71	V		0.178	22.51		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3475.02	Sub6 n77(78)/ 50 MHz [30 kHz]	QPSK	82.59	37.85	120.44	V	< 1.00	0.334	25.24	1	1
		16-QAM	82.19	37.85	120.04	V		0.305	24.84		
		64-QAM	80.27	37.85	118.12	V		0.196	22.92		
3500.01		QPSK	82.95	37.99	120.94	V		0.375	25.74	1	66
		16-QAM	82.32	37.99	120.31	V		0.324	25.11		
		64-QAM	80.50	37.99	118.49	V		0.213	23.29		
3525.00		QPSK	81.59	38.03	119.62	V		0.276	24.42	1	1
		16-QAM	81.29	38.03	119.32	V		0.258	24.12		
		64-QAM	79.33	38.03	117.36	V		0.164	22.16		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3480.00	Sub6 n77(78)/ 60 MHz [30 kHz]	QPSK	82.54	37.83	120.37	V	< 1.00	0.329	25.17	1	1
		16-QAM	81.29	37.83	119.12	V		0.247	23.92		
		64-QAM	80.64	37.83	118.47	V		0.212	23.27		
3500.01		QPSK	83.18	37.99	121.17	V		0.395	25.97	1	81
		16-QAM	82.55	37.99	120.54	V		0.342	25.34		
		64-QAM	80.84	37.99	118.83	V		0.231	23.63		
3519.99		QPSK	81.97	37.95	119.92	V		0.297	24.72	1	1
		16-QAM	81.55	37.95	119.50	V		0.269	24.30		
		64-QAM	79.17	37.95	117.12	V		0.156	21.92		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3485.01	Sub6 n77(78)/ 70 MHz [30 kHz]	QPSK	82.45	37.84	120.29	V	< 1.00	0.323	25.09	1	1
		16-QAM	81.50	37.84	119.34	V		0.260	24.14		
		64-QAM	80.39	37.84	118.23	V		0.201	23.03		
3500.01		QPSK	83.19	37.99	121.18	V		0.396	25.98	1	94
		16-QAM	82.25	37.99	120.24	V		0.319	25.04		
		64-QAM	80.76	37.99	118.75	V		0.226	23.55		
3514.98		QPSK	81.99	38.24	120.23	V		0.319	25.03	1	1
		16-QAM	81.81	38.24	120.05	V		0.306	24.85		
		64-QAM	79.80	38.24	118.04	V		0.192	22.84		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3490.02	Sub6 n77(78)/ 80 MHz [30 kHz]	QPSK	82.77	37.81	120.58	V	< 1.00	0.345	25.38	1	1
		16-QAM	82.40	37.81	120.21	V		0.317	25.01		
		64-QAM	80.19	37.81	118.00	V		0.191	22.80		
3500.01		QPSK	82.63	37.99	120.62	V		0.348	25.42	1	108
		16-QAM	82.42	37.99	120.41	V		0.332	25.21		
		64-QAM	80.89	37.99	118.88	V		0.233	23.68		
3510.00		QPSK	82.10	38.21	120.31	V		0.324	25.11	1	1
		16-QAM	81.95	38.21	120.16	V		0.313	24.96		
		64-QAM	79.71	38.21	117.92	V		0.187	22.72		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3495.00	Sub6 n77(78)/ 90 MHz [30 kHz]	QPSK	82.69	28.68	120.61	V	< 1.00	0.348	25.41	1	1
		16-QAM	82.29	28.68	120.21	V		0.317	25.01		
		64-QAM	80.29	28.68	118.21	V		0.200	23.01		
3500.01		QPSK	82.59	28.71	120.58	V		0.346	25.38	1	122
		16-QAM	82.34	28.71	120.33	V		0.326	25.13		
		64-QAM	80.67	28.71	118.66	V		0.222	23.46		
3504.99		QPSK	81.87	28.75	119.84	V		0.291	24.64	1	122
		16-QAM	81.50	28.75	119.47	V		0.267	24.27		
		64-QAM	79.42	28.75	117.39	V		0.166	22.19		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3500.01	Sub6 n77(78)/ 100 MHz [30 kHz]	QPSK	83.14	37.99	121.13	V	< 1.00	0.392	25.93	1	136
		16-QAM	82.19	37.99	120.18	V		0.315	24.98		
		64-QAM	80.59	37.99	118.58	V		0.218	23.38		

8.2.3 Internal Antenna_SISO

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBµV)	A.F+C.L+D.F (dB/m)	Total (dBµV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3460.02	Sub6 n77(78)/ 20 MHz [30 kHz]	PI/2 BPSK	82.86	37.86	120.72	H	< 1.00	0.356	25.52	1	49
		QPSK	82.77	37.86	120.63	H		0.349	25.43		
		16-QAM	81.78	37.86	119.64	H		0.278	24.44		
		64-QAM	80.57	37.86	118.43	H		0.210	23.23		
3500.01		PI/2 BPSK	83.35	37.99	121.34	H		0.412	26.14	1	1
		QPSK	83.30	37.99	121.29	H		0.407	26.09		
		16-QAM	82.39	37.99	120.38	H		0.330	25.18		
		64-QAM	80.93	37.99	118.92	H		0.236	23.72		
3540.00		PI/2 BPSK	83.12	38.33	121.45	H		0.422	26.25	1	1
		QPSK	83.01	38.33	121.34	H		0.411	26.14		
		16-QAM	82.09	38.33	120.42	H		0.333	25.22		
		64-QAM	80.69	38.33	119.02	H		0.241	23.82		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBµV)	A.F+C.L+D.F (dB/m)	Total (dBµV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3465.00	Sub6 n77(78)/ 30 MHz [30 kHz]	PI/2 BPSK	83.38	37.87	121.25	H	< 1.00	0.403	26.05	1	76
		QPSK	83.28	37.87	121.15	H		0.393	25.95		
		16-QAM	82.44	37.87	120.31	H		0.324	25.11		
		64-QAM	80.84	37.87	118.71	H		0.224	23.51		
3500.01		PI/2 BPSK	83.89	37.99	121.88	H		0.466	26.68	1	76
		QPSK	83.77	37.99	121.76	H		0.453	26.56		
		16-QAM	82.89	37.99	120.88	H		0.370	25.68		
		64-QAM	81.32	37.99	119.31	H		0.258	24.11		
3534.99		PI/2 BPSK	83.25	38.24	121.49	H		0.426	26.29	1	1
		QPSK	83.20	38.24	121.44	H		0.421	26.24		
		16-QAM	82.23	38.24	120.47	H		0.336	25.27		
		64-QAM	80.74	38.24	118.98	H		0.239	23.78		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3470.01	Sub6 n77(78)/ 40 MHz [30 kHz]	PI/2 BPSK	83.31	37.97	121.28	H	< 1.00	0.405	26.08	1	104
		QPSK	83.30	37.97	121.27	H		0.405	26.07		
		16-QAM	82.33	37.97	120.30	H		0.324	25.10		
		64-QAM	80.82	37.97	118.79	H		0.229	23.59		
3500.01		PI/2 BPSK	83.98	37.99	121.97	H		0.475	26.77	1	104
		QPSK	83.84	37.99	121.83	H		0.460	26.63		
		16-QAM	82.97	37.99	120.96	H		0.377	25.76		
		64-QAM	81.29	37.99	119.28	H		0.256	24.08		
3529.98		PI/2 BPSK	83.32	38.12	121.44	H		0.421	26.24	1	104
		QPSK	83.26	38.12	121.38	H		0.415	26.18		
		16-QAM	82.34	38.12	120.46	H		0.336	25.26		
		64-QAM	80.78	38.12	118.90	H		0.235	23.70		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3475.02	Sub6 n77(78)/ 50 MHz [30 kHz]	PI/2 BPSK	83.34	37.85	121.19	H	< 1.00	0.397	25.99	1	131
		QPSK	83.32	37.85	121.17	H		0.395	25.97		
		16-QAM	82.30	37.85	120.15	H		0.313	24.95		
		64-QAM	80.90	37.85	118.75	H		0.226	23.55		
3500.01		PI/2 BPSK	83.63	37.99	121.62	H		0.439	26.42	1	1
		QPSK	83.61	37.99	121.60	H		0.437	26.40		
		16-QAM	82.65	37.99	120.64	H		0.350	25.44		
		64-QAM	81.15	37.99	119.14	H		0.248	23.94		
3525.00		PI/2 BPSK	83.24	38.03	121.27	H		0.404	26.07	1	131
		QPSK	83.21	38.03	121.24	H		0.401	26.04		
		16-QAM	82.18	38.03	120.21	H		0.317	25.01		
		64-QAM	80.74	38.03	118.77	H		0.227	23.57		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3480.00	Sub6 n77(78)/ 60 MHz [30 kHz]	PI/2 BPSK	83.60	37.83	121.43	H	< 1.00	0.420	26.23	1	81
		QPSK	83.42	37.83	121.25	H		0.403	26.05		
		16-QAM	82.36	37.83	120.19	H		0.316	24.99		
		64-QAM	81.00	37.83	118.83	H		0.231	23.63		
3500.01		PI/2 BPSK	83.79	37.99	121.78	H		0.455	26.58	1	81
		QPSK	83.70	37.99	121.69	H		0.446	26.49		
		16-QAM	82.78	37.99	120.77	H		0.361	25.57		
		64-QAM	81.23	37.99	119.22	H		0.252	24.02		
3519.99		PI/2 BPSK	83.52	37.95	121.47	H		0.424	26.27	1	1
		QPSK	83.51	37.95	121.46	H		0.423	26.26		
		16-QAM	82.54	37.95	120.49	H		0.338	25.29		
		64-QAM	81.01	37.95	118.96	H		0.238	23.76		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3485.01	Sub6 n77(78)/ 70 MHz [30 kHz]	PI/2 BPSK	83.51	37.84	121.35	H	< 1.00	0.412	26.15	1	94
		QPSK	83.50	37.84	121.34	H		0.411	26.14		
		16-QAM	82.46	37.84	120.30	H		0.324	25.10		
		64-QAM	81.06	37.84	118.90	H		0.235	23.70		
3500.01		PI/2 BPSK	83.70	37.99	121.69	H		0.446	26.49	1	187
		QPSK	83.64	37.99	121.63	H		0.440	26.43		
		16-QAM	82.64	37.99	120.63	H		0.350	25.43		
		64-QAM	81.16	37.99	119.15	H		0.248	23.95		
3514.98		PI/2 BPSK	83.32	38.24	121.56	H		0.433	26.36	1	1
		QPSK	83.19	38.24	121.43	H		0.420	26.23		
		16-QAM	82.42	38.24	120.66	H		0.352	25.46		
		64-QAM	80.82	38.24	119.06	H		0.243	23.86		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3490.02	Sub6 n77(78)/ 80 MHz [30 kHz]	PI/2 BPSK	83.68	37.81	121.49	H	< 1.00	0.426	26.29	1	108
		QPSK	83.66	37.81	121.47	H		0.424	26.27		
		16-QAM	82.71	37.81	120.52	H		0.341	25.32		
		64-QAM	81.16	37.81	118.97	H		0.238	23.77		
3500.01		PI/2 BPSK	83.75	37.99	121.74	H		0.451	26.54	1	108
		QPSK	83.74	37.99	121.73	H		0.450	26.53		
		16-QAM	82.79	37.99	120.78	H		0.362	25.58		
		64-QAM	81.29	37.99	119.28	H		0.256	24.08		
3510.00		PI/2 BPSK	83.52	38.21	121.73	H		0.450	26.53	1	108
		QPSK	83.40	38.21	121.61	H		0.437	26.41		
		16-QAM	82.62	38.21	120.83	H		0.366	25.63		
		64-QAM	80.92	38.21	119.13	H		0.247	23.93		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3495.00	Sub6 n77(78)/ 90 MHz [30 kHz]	PI/2 BPSK	83.62	37.92	121.54	H	< 1.00	0.431	26.34	1	243
		QPSK	83.55	37.92	121.47	H		0.424	26.27		
		16-QAM	82.61	37.92	120.53	H		0.341	25.33		
		64-QAM	81.10	37.92	119.02	H		0.241	23.82		
3500.01		PI/2 BPSK	83.71	37.99	121.70	H		0.447	26.50	1	122
		QPSK	83.67	37.99	121.66	H		0.443	26.46		
		16-QAM	82.69	37.99	120.68	H		0.354	25.48		
		64-QAM	81.20	37.99	119.19	H		0.251	23.99		
3504.99		PI/2 BPSK	83.78	37.97	121.75	H		0.452	26.55	1	122
		QPSK	83.76	37.97	121.73	H		0.450	26.53		
		16-QAM	82.82	37.97	120.79	H		0.362	25.59		
		64-QAM	81.38	37.97	119.35	H		0.260	24.15		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3500.01	Sub6 n77(78)/ 100 MHz [30 kHz]	PI/2 BPSK	83.34	37.99	121.33	H	< 1.00	0.410	26.13	1	271
		QPSK	83.26	37.99	121.25	H		0.403	26.05		
		16-QAM	82.34	37.99	120.33	H		0.326	25.13		
		64-QAM	80.98	37.99	118.97	H		0.238	23.77		

8.2.4 Internal Antenna_MIMO

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBµV)	A.F+C.L+D.F (dB/m)	Total (dBµV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3460.02	Sub6 n77(78)/ 20 MHz [30 kHz]	QPSK	84.75	2.59	122.61	V	< 1.00	0.550	27.41	1	49
		16-QAM	83.54	3.80	121.40	V		0.417	26.20		
		64-QAM	82.44	4.90	120.30	V		0.323	25.10		
3500.01		QPSK	85.92	1.29	123.91	V		0.743	28.71	1	49
		16-QAM	85.75	1.46	123.74	V		0.714	28.54		
		64-QAM	83.40	3.81	121.39	V		0.416	26.19		
3540.00		QPSK	85.45	1.43	123.78	V		0.720	28.58	1	1
		16-QAM	85.21	1.67	123.54	V		0.682	28.34		
		64-QAM	83.39	3.49	121.72	V		0.449	26.52		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBµV)	A.F+C.L+D.F (dB/m)	Total (dBµV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3465.00	Sub6 n77(78)/ 30 MHz [30 kHz]	QPSK	84.74	2.59	122.61	V	< 1.00	0.551	27.41	1	76
		16-QAM	84.41	2.92	122.28	V		0.511	27.08		
		64-QAM	82.64	4.69	120.51	V		0.340	25.31		
3500.01		QPSK	86.00	1.21	123.99	V		0.757	28.79	1	76
		16-QAM	85.69	1.52	123.68	V		0.705	28.48		
		64-QAM	83.87	3.34	121.86	V		0.463	26.66		
3534.99		QPSK	85.44	1.52	123.68	V		0.705	28.48	1	76
		16-QAM	85.13	1.83	123.37	V		0.656	28.17		
		64-QAM	83.42	3.54	121.66	V		0.443	26.46		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3470.01	Sub6 n77(78)/ 40 MHz [30 kHz]	QPSK	84.99	2.24	122.96	V	< 1.00	0.597	27.76	1	104
		16-QAM	84.70	2.53	122.67	V		0.558	27.47		
		64-QAM	82.85	4.38	120.82	V		0.365	25.62		
3500.01		QPSK	85.98	1.23	123.97	V		0.753	28.77	1	104
		16-QAM	85.75	1.46	123.74	V		0.714	28.54		
		64-QAM	83.87	3.34	121.86	V		0.463	26.66		
3529.98		QPSK	85.72	1.36	123.84	V		0.731	28.64	1	104
		16-QAM	85.24	1.84	123.36	V		0.655	28.16		
		64-QAM	83.48	3.60	121.60	V		0.437	26.40		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3475.02	Sub6 n77(78)/ 50 MHz [30 kHz]	QPSK	85.27	2.08	123.12	V	< 1.00	0.619	27.92	1	131
		16-QAM	84.97	2.38	122.82	V		0.578	27.62		
		64-QAM	82.80	4.55	120.65	V		0.351	25.45		
3500.01		QPSK	85.98	1.23	123.97	V		0.753	28.77	1	1
		16-QAM	85.75	1.46	123.74	V		0.714	28.54		
		64-QAM	83.53	3.68	121.52	V		0.429	26.32		
3525.00		QPSK	85.49	1.68	123.52	V		0.679	28.32	1	131
		16-QAM	85.08	2.09	123.11	V		0.618	27.91		
		64-QAM	83.39	3.78	121.42	V		0.419	26.22		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3480.00	Sub6 n77(78)/ 60 MHz [30 kHz]	QPSK	85.32	2.05	123.15	V	< 1.00	0.624	27.95	1	160
		16-QAM	85.01	2.36	122.84	V		0.581	27.64		
		64-QAM	83.21	4.16	121.04	V		0.384	25.84		
3500.01		QPSK	86.14	1.07	124.13	V		0.782	28.93	1	160
		16-QAM	85.85	1.36	123.84	V		0.731	28.64		
		64-QAM	83.70	3.51	121.69	V		0.446	26.49		
3519.99		QPSK	85.69	1.56	123.64	V		0.698	28.44	1	160
		16-QAM	85.49	1.76	123.44	V		0.667	28.24		
		64-QAM	83.36	3.89	121.31	V		0.408	26.11		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3485.01	Sub6 n77(78)/ 70 MHz [30 kHz]	QPSK	85.78	1.58	123.62	V	< 1.00	0.695	28.42	1	187
		16-QAM	85.41	1.95	123.25	V		0.639	28.05		
		64-QAM	83.30	4.06	121.14	V		0.393	25.94		
3500.01		QPSK	85.88	1.33	123.87	V		0.737	28.67	1	187
		16-QAM	85.56	1.65	123.55	V		0.685	28.35		
		64-QAM	83.84	3.37	121.83	V		0.460	26.63		
3514.98		QPSK	85.71	1.25	123.95	V		0.750	28.75	1	187
		16-QAM	85.44	1.52	123.68	V		0.705	28.48		
		64-QAM	83.22	3.74	121.46	V		0.423	26.26		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3490.02	Sub6 n77(78)/ 80 MHz [30 kHz]	QPSK	85.80	1.59	123.61	V	< 1.00	0.694	28.41	1	215
		16-QAM	85.45	1.94	123.26	V		0.640	28.06		
		64-QAM	83.60	3.79	121.41	V		0.418	26.21		
3500.01		QPSK	85.77	1.44	123.76	V		0.719	28.56	1	215
		16-QAM	85.60	1.61	123.59	V		0.691	28.39		
		64-QAM	83.78	3.43	121.77	V		0.454	26.57		
3510.00		QPSK	85.75	1.24	123.96	V		0.752	28.76	1	215
		16-QAM	85.48	1.51	123.69	V		0.706	28.49		
		64-QAM	83.38	3.61	121.59	V		0.435	26.39		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3495.00	Sub6 n77(78)/ 90 MHz [30 kHz]	QPSK	85.82	1.46	123.74	V	< 1.00	0.714	28.54	1	243
		16-QAM	85.55	1.73	123.47	V		0.672	28.27		
		64-QAM	83.74	3.54	121.66	V		0.443	26.46		
3500.01		QPSK	86.06	1.15	124.05	V		0.768	28.85	1	243
		16-QAM	85.76	1.45	123.75	V		0.717	28.55		
		64-QAM	83.67	3.54	121.66	V		0.443	26.46		
3504.99		QPSK	86.11	1.12	124.08	V		0.773	28.88	1	243
		16-QAM	85.81	1.42	123.78	V		0.721	28.58		
		64-QAM	83.68	3.55	121.65	V		0.442	26.45		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3500.01	Sub6 n77(78)/ 100 MHz [30 kHz]	QPSK	86.11	1.10	124.10	V	< 1.00	0.776	28.90	1	271
		16-QAM	85.75	1.46	123.74	V		0.714	28.54		
		64-QAM	83.69	3.52	121.68	V		0.445	26.48		

8.3 RADIATED SPURIOUS EMISSIONS

8.3.1 External Antenna_SISO

▣ NR Band: N77(78)

▣ Bandwidth: 90 MHz

▣ Modulation: PI/2 BPSK

▣ Distance: 3 meters

▣ SCS: 30 kHz

Ch	Freq (MHz)	Measured Level (dBµV)	A.F+C.L+D.F+H.P.F -A.G (dB/m)	Total (dBµV/m)	Pol.	Result (dBm)	Limit (dBm)	RB	
								Size	Offset
633000 (3495.00)	6 990.00	49.05	-1.52	47.53	V	-47.67	-13.00	1	1
	10 485.00	49.72	5.05	54.77	V	-40.43	-13.00		
	13 980.00	48.06	7.69	55.75	V	-39.45	-13.00		
	17 475.00	48.00	11.40	59.40	V	-35.80	-13.00		
633334 (3500.01)	7 000.02	49.90	-1.47	48.43	V	-46.77	-13.00	1	1
	10 500.03	49.38	5.06	54.44	V	-40.76	-13.00		
	14 000.04	47.55	7.68	55.23	V	-39.97	-13.00		
	17 500.05	47.14	11.66	58.80	V	-36.40	-13.00		
636666 (3504.99)	7 009.98	50.13	-1.41	48.73	V	-46.48	-13.00	1	1
	10 514.97	49.68	5.06	54.74	V	-40.46	-13.00		
	14 019.96	47.76	7.69	55.45	V	-39.75	-13.00		
	17 524.95	48.12	11.98	60.10	V	-35.10	-13.00		

8.3.2 External Antenna_MIMO

- ▣ NR Band: N77(78)
- ▣ Bandwidth: 20 MHz
- ▣ Modulation: QPSK
- ▣ Distance: 3 meters
- ▣ SCS: 30 kHz

Ch	Freq (MHz)	Measured Level (dBμV)	A.F+C.L+D.F+H.P.F -A.G (dB/m)	Total (dBμV/m)	Pol.	Result (dBm)	Limit (dBm)	RB	
								Size	Offset
630668 (3460.02)	6 920.04	49.46	-2.08	47.39	V	-47.82	-13.00	1	1
	10 380.06	50.39	5.22	55.61	V	-39.59	-13.00		
	13 840.08	47.46	7.20	54.66	V	-40.54	-13.00		
	17 300.10	46.66	10.31	56.97	V	-38.23	-13.00		
633334 (3500.01)	7 000.02	49.71	-1.47	48.24	V	-46.96	-13.00	1	25
	10 500.03	49.13	5.06	54.19	V	-41.01	-13.00		
	14 000.04	46.84	7.68	54.52	V	-40.68	-13.00		
	17 500.05	47.11	11.66	58.77	V	-36.43	-13.00		
636000 (3540.0)	7 080.00	51.33	-0.85	50.48	V	-44.72	-13.00	1	1
	10 620.00	48.62	5.43	54.05	V	-41.15	-13.00		
	14 160.00	47.03	8.17	55.20	V	-40.00	-13.00		
	17 700.00	46.07	13.31	59.38	V	-35.82	-13.00		

8.3.3 Internal Antenna_SISO

▣ NR Band: N77(78)

▣ Bandwidth: 40 MHz

▣ Modulation: PI/2 BPSK

▣ Distance: 3 meters

▣ SCS: 30 kHz

Ch	Freq (MHz)	Measured Level (dBµV)	A.F+C.L+D.F+H.P.F -A.G (dB/m)	Total (dBµV/m)	Pol.	Result (dBm)	Limit (dBm)	RB	
								Size	Offset
631334 (3470.01)	6 940.02	52.14	-1.99	50.15	V	-45.05	-13.00	1	104
	10 410.03	55.85	5.26	61.11	V	-34.10	-13.00		
	13 880.04	45.30	7.25	52.55	H	-42.65	-13.00		
633334 (3500.01)	7 000.02	50.99	-1.47	49.52	H	-45.68	-13.00	1	104
	10 500.03	53.54	5.06	58.60	H	-36.60	-13.00		
	14 000.04	43.48	7.68	51.16	H	-44.04	-13.00		
635332 (3529.98)	7 059.96	46.72	-1.01	45.71	V	-49.49	-13.00	1	104
	10 589.94	54.40	5.44	59.84	V	-35.36	-13.00		
	14 119.92	41.78	8.05	49.83	V	-45.37	-13.00		

8.3.4 Internal Antenna_MIMO

- ▣ NR Band: N77(78)
- ▣ Bandwidth: 60 MHz
- ▣ Modulation: PI/2 BPSK
- ▣ Distance: 3 meters
- ▣ SCS: 30 kHz

Ch	Freq (MHz)	Measured Level (dBμV)	A.F+C.L+D.F+H.P.F -A.G (dB/m)	Total (dBμV/m)	Pol.	Result (dBm)	Limit (dBm)	RB	
								Size	Offset
632000 (3480.00)	6 960.00	53.25	-1.88	51.38	H	-43.83	-13.00	1	160
	10 440.00	50.06	5.02	55.08	V	-40.12	-13.00		
	13 920.00	44.19	7.43	51.62	V	-43.58	-13.00		
	17 400.00	49.53	11.38	60.91	V	-34.29	-13.00		
633334 (3500.01)	7 000.02	51.83	-1.47	50.36	H	-44.84	-13.00	1	160
	10 500.03	50.12	5.06	55.18	H	-40.02	-13.00		
	14 000.04	44.41	7.68	52.09	H	-43.11	-13.00		
	17 500.05	51.20	11.66	62.86	H	-32.34	-13.00		
634666 (3519.99)	7 039.98	55.83	-1.12	54.71	H	-40.49	-13.00	1	160
	10 559.97	50.79	5.29	56.08	V	-39.12	-13.00		
	14 079.96	41.79	7.96	49.75	V	-45.45	-13.00		
	17 599.95	49.40	12.55	61.95	V	-33.25	-13.00		

8.4 PEAK-TO-AVERAGE RATIO

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (dB)
Sub6 n77(78)	20 MHz	3500.01	BPSK	Full RB	0	4.81
			QPSK			5.29
			16-QAM			6.22
			64-QAM			6.66
	30 MHz		BPSK			4.51
			QPSK			5.13
			16-QAM			6.08
			64-QAM			6.66
	40 MHz		BPSK			4.65
			QPSK			5.08
			16-QAM			6.07
			64-QAM			6.56
	50 MHz		BPSK			4.45
			QPSK			5.10
			16-QAM			6.18
			64-QAM			6.57
	60 MHz		BPSK			4.68
			QPSK			5.18
			16-QAM			6.16
			64-QAM			6.64
	70 MHz		BPSK			4.41
			QPSK			5.04
			16-QAM			6.00
			64-QAM			6.66
	80 MHz		BPSK			4.58
			QPSK			5.12
			16-QAM			6.08
			64-QAM			6.59
	90 MHz		BPSK			4.47
			QPSK			5.13
			16-QAM			6.11
			64-QAM			6.56
	100 MHz		BPSK			4.45
			QPSK			5.18
			16-QAM			6.21
			64-QAM			6.52

Note:

1. Plots of the EUT's Peak- to- Average Ratio are shown Page 169 ~ 204.

8.5 OCCUPIED BANDWIDTH

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (MHz)
Sub6 n77(78)	20 MHz	3500.01	BPSK	Full RB	0	17.922
			QPSK			17.915
			16-QAM			17.982
			64-QAM			17.918
	30 MHz		BPSK			26.879
			QPSK			26.855
			16-QAM			26.924
			64-QAM			26.929
	40 MHz		BPSK			35.884
			QPSK			35.762
			16-QAM			35.903
			64-QAM			35.821
	50 MHz		BPSK			45.779
			QPSK			46.018
			16-QAM			45.807
			64-QAM			45.851
	60 MHz		BPSK			58.167
			QPSK			57.980
			16-QAM			58.001
			64-QAM			57.894
	70 MHz		BPSK			64.536
			QPSK			64.524
			16-QAM			64.561
			64-QAM			64.485
	80 MHz		BPSK			77.211
			QPSK			77.251
			16-QAM			77.415
			64-QAM			77.307
	90 MHz		BPSK			86.906
			QPSK			87.123
			16-QAM			86.958
			64-QAM			86.987
	100 MHz		BPSK			96.516
			QPSK			96.506
			16-QAM			96.683
			64-QAM			96.624

Note:

1. Plots of the EUT's Occupied Bandwidth are shown Page 133 ~ 168.

8.6 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)	20	3460.02	4.9502	37.190	-71.333	-34.143	-13.00
		3500.01	4.9367	37.190	-70.839	-33.649	
		3540.00	8.2692	37.805	-70.729	-32.924	
	30	3465.00	5.0175	37.805	-71.359	-33.554	
		3500.01	9.1266	37.805	-71.002	-33.197	
		3534.99	8.8744	37.805	-70.136	-32.331	
	40	3470.01	8.3764	37.805	-70.445	-32.640	
		3500.01	8.7921	37.805	-70.011	-32.206	
		3529.98	8.8729	37.805	-70.360	-32.555	
	50	3475.02	9.6675	37.805	-71.239	-33.434	
		3500.01	9.7049	37.805	-71.412	-33.607	
		3525.00	5.4801	37.805	-70.960	-33.155	
	60	3480.00	4.9103	37.190	-71.362	-34.172	
		3500.01	8.8535	37.805	-70.328	-32.523	
		3519.99	9.4277	37.805	-69.501	-31.696	
	70	3485.01	9.6959	37.805	-71.057	-33.252	
		3500.01	8.5553	37.805	-70.812	-33.007	
		3514.98	9.7233	37.805	-71.207	-33.402	
	80	3490.02	8.2882	37.805	-70.606	-32.801	
		3500.01	8.2657	37.805	-71.187	-33.382	
		3510.00	9.0389	37.805	-71.150	-33.345	
	90	3495.00	9.9945	37.805	-70.246	-32.441	
		3500.01	8.2543	37.805	-71.017	-33.212	
		3504.99	9.1361	37.805	-70.876	-33.071	
	100	3500.01	5.1984	37.805	-71.216	-33.411	

Note:

1. Plots of the EUT's Conducted Spurious Emissions are shown Page 313 ~ 362.
2. Duty Cycle factor already applied on the factor.
   - Duty Cycle Factor(dB) = 6.990

   - Factor(dB) = Duty Cycle factor + Cable Loss + Ext. Attenuator + Power Splitter
   - Result(dBm) = Reading + Factor

3. Factor(dB)

Frequency Range (GHz)	Factor [dB]
0.03 – 1	34.484
1 – 5	37.190
5 – 10	37.805
10 – 15	38.330
15 – 20	38.703
Above 20	39.345

8.7 BAND EDGE

1. Plots of the EUT's Band Edge are shown Page 205 ~ 312.
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

8.8 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE

▣ BandWidth: 20 MHz

▣ Voltage(100 %): 13.500 VDC

▣ LIMIT: Emission must remain in band

Test. Frequncy	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3460.020	100 %	+20(Ref)	3460 019 971	0.0	0.000 000	0.000
	100 %	-30	3460 019 951	-19.8	-0.000 001	-0.006
	100 %	-20	3460 019 948	-22.5	-0.000 001	-0.006
	100 %	-10	3460 019 936	-34.4	-0.000 001	-0.010
	100 %	0	3460 019 928	-42.3	-0.000 001	-0.012
	100 %	+10	3460 019 931	-39.3	-0.000 001	-0.011
	100 %	+30	3460 019 925	-45.8	-0.000 001	-0.013
	100 %	+40	3460 019 941	-30.1	-0.000 001	-0.009
	100 %	+50	3460 019 950	-20.9	-0.000 001	-0.006
	85 %	+20	3460 019 945	-25.4	-0.000 001	-0.007
	115 %	+20	3460 019 951	-19.9	-0.000 001	-0.006
3540.000	100 %	+20(Ref)	3539 999 979	0.0	0.000 000	0.000
	100 %	-30	3539 999 955	-23.9	-0.000 001	-0.007
	100 %	-20	3539 999 952	-26.8	-0.000 001	-0.008
	100 %	-10	3539 999 945	-34.4	-0.000 001	-0.010
	100 %	0	3539 999 964	-15.3	0.000 000	-0.004
	100 %	+10	3539 999 956	-23.0	-0.000 001	-0.006
	100 %	+30	3539 999 953	-26.3	-0.000 001	-0.007
	100 %	+40	3539 999 951	-28.6	-0.000 001	-0.008
	100 %	+50	3539 999 947	-32.0	-0.000 001	-0.009
	85 %	+20	3539 999 950	-29.4	-0.000 001	-0.008
	115 %	+20	3539 999 952	-27.5	-0.000 001	-0.008

▣ BandWidth: 30 MHz

▣ Voltage(100 %): 13.500 VDC

▣ LIMIT: Emission must remain in band

Test. Frequncy	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3465.000	100 %	+20(Ref)	3464 999 966	0.0	0.000 000	0.000
	100 %	-30	3464 999 946	-19.9	-0.000 001	-0.006
	100 %	-20	3464 999 962	-3.6	0.000 000	-0.001
	100 %	-10	3464 999 936	-29.8	-0.000 001	-0.009
	100 %	0	3464 999 934	-31.7	-0.000 001	-0.009
	100 %	+10	3464 999 927	-38.8	-0.000 001	-0.011
	100 %	+30	3464 999 948	-17.7	-0.000 001	-0.005
	100 %	+40	3464 999 943	-22.5	-0.000 001	-0.007
	100 %	+50	3464 999 941	-25.0	-0.000 001	-0.007
	85 %	+20	3464 999 939	-26.7	-0.000 001	-0.008
	115 %	+20	3464 999 935	-31.1	-0.000 001	-0.009
3534.990	100 %	+20(Ref)	3534 989 989	0.0	0.000 000	0.000
	100 %	-30	3534 989 979	-10.6	0.000 000	-0.003
	100 %	-20	3534 989 971	-18.5	-0.000 001	-0.005
	100 %	-10	3534 989 970	-19.1	-0.000 001	-0.005
	100 %	0	3534 989 968	-21.4	-0.000 001	-0.006
	100 %	+10	3534 989 984	-5.8	0.000 000	-0.002
	100 %	+30	3534 989 965	-24.6	-0.000 001	-0.007
	100 %	+40	3534 989 959	-30.3	-0.000 001	-0.009
	100 %	+50	3534 989 960	-29.2	-0.000 001	-0.008
	85 %	+20	3534 989 958	-31.1	-0.000 001	-0.009
	115 %	+20	3534 989 971	-18.6	-0.000 001	-0.005

▣ BandWidth: 40 MHz

▣ Voltage(100 %): 13.500 VDC

▣ LIMIT: Emission must remain in band

Test. Frequncy	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3470.010	100 %	+20(Ref)	3470 009 969	0.0	0.000 000	0.000
	100 %	-30	3470 009 933	-35.6	-0.000 001	-0.010
	100 %	-20	3470 009 931	-37.4	-0.000 001	-0.011
	100 %	-10	3470 009 930	-39.2	-0.000 001	-0.011
	100 %	0	3470 009 949	-19.9	-0.000 001	-0.006
	100 %	+10	3470 009 947	-22.0	-0.000 001	-0.006
	100 %	+30	3470 009 946	-23.2	-0.000 001	-0.007
	100 %	+40	3470 009 943	-26.1	-0.000 001	-0.008
	100 %	+50	3470 009 942	-26.7	-0.000 001	-0.008
	85 %	+20	3470 009 940	-28.5	-0.000 001	-0.008
	115 %	+20	3470 009 938	-30.5	-0.000 001	-0.009
3529.980	100 %	+20(Ref)	3529 979 987	0.0	0.000 000	0.000
	100 %	-30	3529 979 972	-15.1	0.000 000	-0.004
	100 %	-20	3529 979 992	4.6	0.000 000	0.001
	100 %	-10	3529 979 967	-19.8	-0.000 001	-0.006
	100 %	0	3529 979 965	-22.0	-0.000 001	-0.006
	100 %	+10	3529 979 965	-22.4	-0.000 001	-0.006
	100 %	+30	3529 979 964	-23.4	-0.000 001	-0.007
	100 %	+40	3529 979 962	-24.7	-0.000 001	-0.007
	100 %	+50	3529 979 960	-26.9	-0.000 001	-0.008
	85 %	+20	3529 979 963	-23.8	-0.000 001	-0.007
	115 %	+20	3529 979 960	-26.9	-0.000 001	-0.008

▣ BandWidth: 50 MHz

▣ Voltage(100 %): 13.500 VDC

▣ LIMIT: Emission must remain in band

Test. Frequncy	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3475.020	100 %	+20(Ref)	3475 019 968	0.0	0.000 000	0.000
	100 %	-30	3475 019 934	-34.1	-0.000 001	-0.010
	100 %	-20	3475 019 952	-15.8	0.000 000	-0.005
	100 %	-10	3475 019 948	-19.4	-0.000 001	-0.006
	100 %	0	3475 019 949	-18.6	-0.000 001	-0.005
	100 %	+10	3475 019 946	-22.1	-0.000 001	-0.006
	100 %	+30	3475 019 945	-22.5	-0.000 001	-0.006
	100 %	+40	3475 019 946	-21.9	-0.000 001	-0.006
	100 %	+50	3475 019 940	-27.5	-0.000 001	-0.008
	85 %	+20	3475 019 941	-26.7	-0.000 001	-0.008
	115 %	+20	3475 019 938	-29.4	-0.000 001	-0.008
3525.000	100 %	+20(Ref)	3524 999 972	0.0	0.000 000	0.000
	100 %	-30	3524 999 961	-10.2	0.000 000	-0.003
	100 %	-20	3524 999 938	-33.3	-0.000 001	-0.009
	100 %	-10	3524 999 934	-37.2	-0.000 001	-0.011
	100 %	0	3524 999 953	-18.7	-0.000 001	-0.005
	100 %	+10	3524 999 950	-21.5	-0.000 001	-0.006
	100 %	+30	3524 999 948	-23.7	-0.000 001	-0.007
	100 %	+40	3524 999 949	-22.5	-0.000 001	-0.006
	100 %	+50	3524 999 948	-23.8	-0.000 001	-0.007
	85 %	+20	3524 999 953	-18.4	-0.000 001	-0.005
	115 %	+20	3524 999 951	-21.1	-0.000 001	-0.006

▣ BandWidth: 60 MHz

▣ Voltage(100 %): 13.500 VDC

▣ LIMIT: Emission must remain in band

Test. Frequncy	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3480.000	100 %	+20(Ref)	3479 999 983	0.0	0.000 000	0.000
	100 %	-30	3479 999 942	-40.7	-0.000 001	-0.012
	100 %	-20	3479 999 960	-23.5	-0.000 001	-0.007
	100 %	-10	3479 999 960	-23.5	-0.000 001	-0.007
	100 %	0	3479 999 954	-29.4	-0.000 001	-0.008
	100 %	+10	3479 999 953	-30.1	-0.000 001	-0.009
	100 %	+30	3479 999 953	-30.1	-0.000 001	-0.009
	100 %	+40	3479 999 950	-33.4	-0.000 001	-0.010
	100 %	+50	3479 999 947	-36.4	-0.000 001	-0.010
	85 %	+20	3479 999 950	-33.3	-0.000 001	-0.010
	115 %	+20	3479 999 953	-29.9	-0.000 001	-0.009
3519.990	100 %	+20(Ref)	3519 989 979	0.0	0.000 000	0.000
	100 %	-30	3519 989 957	-22.5	-0.000 001	-0.006
	100 %	-20	3519 989 953	-26.3	-0.000 001	-0.007
	100 %	-10	3519 989 953	-26.3	-0.000 001	-0.007
	100 %	0	3519 989 952	-27.4	-0.000 001	-0.008
	100 %	+10	3519 989 951	-28.7	-0.000 001	-0.008
	100 %	+30	3519 989 951	-28.7	-0.000 001	-0.008
	100 %	+40	3519 989 949	-30.5	-0.000 001	-0.009
	100 %	+50	3519 989 949	-30.8	-0.000 001	-0.009
	85 %	+20	3519 989 954	-25.8	-0.000 001	-0.007
	115 %	+20	3519 989 950	-29.4	-0.000 001	-0.008

▣ BandWidth: 70 MHz

▣ Voltage(100 %): 13.500 VDC

▣ LIMIT: Emission must remain in band

Test. Frequncy	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3485.010	100 %	+20(Ref)	3485 009 970	0.0	0.000 000	0.000
	100 %	-30	3485 009 936	-34.3	-0.000 001	-0.010
	100 %	-20	3485 009 930	-39.9	-0.000 001	-0.011
	100 %	-10	3485 009 930	-39.9	-0.000 001	-0.011
	100 %	0	3485 009 949	-20.8	-0.000 001	-0.006
	100 %	+10	3485 009 925	-44.9	-0.000 001	-0.013
	100 %	+30	3485 009 925	-44.9	-0.000 001	-0.013
	100 %	+40	3485 009 946	-24.6	-0.000 001	-0.007
	100 %	+50	3485 009 946	-24.6	-0.000 001	-0.007
	85 %	+20	3485 009 945	-25.1	-0.000 001	-0.007
	115 %	+20	3485 009 946	-23.7	-0.000 001	-0.007
3514.980	100 %	+20(Ref)	3514 979 979	0.0	0.000 000	0.000
	100 %	-30	3514 979 954	-24.6	-0.000 001	-0.007
	100 %	-20	3514 979 952	-27.3	-0.000 001	-0.008
	100 %	-10	3514 979 952	-27.3	-0.000 001	-0.008
	100 %	0	3514 979 948	-31.0	-0.000 001	-0.009
	100 %	+10	3514 979 973	-5.9	0.000 000	-0.002
	100 %	+30	3514 979 973	-5.9	0.000 000	-0.002
	100 %	+40	3514 979 970	-8.8	0.000 000	-0.003
	100 %	+50	3514 979 967	-12.4	0.000 000	-0.004
	85 %	+20	3514 979 970	-9.4	0.000 000	-0.003
	115 %	+20	3514 979 969	-10.5	0.000 000	-0.003

▣ BandWidth: 80 MHz

▣ Voltage(100 %): 13.500 VDC

▣ LIMIT: Emission must remain in band

Test. Frequncy	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3490.020	100 %	+20(Ref)	3490 019 981	0.0	0.000 000	0.000
	100 %	-30	3490 019 938	-43.2	-0.000 001	-0.012
	100 %	-20	3490 019 938	-43.2	-0.000 001	-0.012
	100 %	-10	3490 019 938	-43.7	-0.000 001	-0.013
	100 %	0	3490 019 957	-24.6	-0.000 001	-0.007
	100 %	+10	3490 019 957	-24.6	-0.000 001	-0.007
	100 %	+30	3490 019 954	-27.3	-0.000 001	-0.008
	100 %	+40	3490 019 951	-30.6	-0.000 001	-0.009
	100 %	+50	3490 019 949	-32.3	-0.000 001	-0.009
	85 %	+20	3490 019 955	-25.9	-0.000 001	-0.007
	115 %	+20	3490 020 010	28.4	0.000 001	0.008
3510.000	100 %	+20(Ref)	3509 999 977	0.0	0.000 000	0.000
	100 %	-30	3509 999 946	-31.3	-0.000 001	-0.009
	100 %	-20	3509 999 963	-14.3	0.000 000	-0.004
	100 %	-10	3509 999 963	-14.3	0.000 000	-0.004
	100 %	0	3509 999 954	-23.5	-0.000 001	-0.007
	100 %	+10	3509 999 948	-29.2	-0.000 001	-0.008
	100 %	+30	3509 999 948	-29.2	-0.000 001	-0.008
	100 %	+40	3509 999 945	-32.2	-0.000 001	-0.009
	100 %	+50	3509 999 942	-35.4	-0.000 001	-0.010
	85 %	+20	3509 999 946	-31.8	-0.000 001	-0.009
	115 %	+20	3509 999 945	-32.2	-0.000 001	-0.009

▣ BandWidth: 90 MHz

▣ Voltage(100 %): 13.500 VDC

▣ LIMIT: Emission must remain in band

Test. Frequncy	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3495.000	100 %	+20(Ref)	3494 999 977	0.0	0.000 000	0.000
	100 %	-30	3494 999 955	-22.8	-0.000 001	-0.007
	100 %	-20	3494 999 955	-22.8	-0.000 001	-0.007
	100 %	-10	3494 999 955	-22.9	-0.000 001	-0.007
	100 %	0	3494 999 957	-20.9	-0.000 001	-0.006
	100 %	+10	3494 999 957	-20.9	-0.000 001	-0.006
	100 %	+30	3494 999 955	-22.4	-0.000 001	-0.006
	100 %	+40	3494 999 953	-24.0	-0.000 001	-0.007
	100 %	+50	3494 999 953	-24.0	-0.000 001	-0.007
	85 %	+20	3494 999 952	-25.6	-0.000 001	-0.007
	115 %	+20	3494 999 954	-23.9	-0.000 001	-0.007
3504.990	100 %	+20(Ref)	3504 989 974	0.0	0.000 000	0.000
	100 %	-30	3504 989 967	-7.6	0.000 000	-0.002
	100 %	-20	3504 989 967	-7.6	0.000 000	-0.002
	100 %	-10	3504 989 946	-28.0	-0.000 001	-0.008
	100 %	0	3504 989 944	-30.6	-0.000 001	-0.009
	100 %	+10	3504 989 944	-30.6	-0.000 001	-0.009
	100 %	+30	3504 989 943	-30.9	-0.000 001	-0.009
	100 %	+40	3504 989 944	-30.6	-0.000 001	-0.009
	100 %	+50	3504 989 944	-30.6	-0.000 001	-0.009
	85 %	+20	3504 989 945	-29.3	-0.000 001	-0.008
	115 %	+20	3504 989 943	-31.8	-0.000 001	-0.009

▣ BandWidth: 100 MHz

▣ Voltage(100 %): 13.500 VDC

▣ LIMIT: Emission must remain in band

Test. Frequncy	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3500.010	100 %	+20(Ref)	3500 009 969	0.0	0.000 000	0.000
	100 %	-30	3500 009 931	-37.2	-0.000 001	-0.011
	100 %	-20	3500 009 931	-37.2	-0.000 001	-0.011
	100 %	-10	3500 009 947	-21.8	-0.000 001	-0.006
	100 %	0	3500 009 943	-25.1	-0.000 001	-0.007
	100 %	+10	3500 009 943	-25.1	-0.000 001	-0.007
	100 %	+30	3500 009 940	-28.2	-0.000 001	-0.008
	100 %	+40	3500 009 957	-11.6	0.000 000	-0.003
	100 %	+50	3500 009 957	-11.6	0.000 000	-0.003
	85 %	+20	3500 009 953	-15.4	0.000 000	-0.004
	115 %	+20	3500 009 955	-13.7	0.000 000	-0.004

9. TEST DATA (3700 MHz - 3980 MHz)

9.1 Conducted Output Power

9.1.1 SISO

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						647334	656000	664666
						3710.01 MHz	3840 MHz	3969.99MHz
20MHz	30	DFT-s	pi/2 BPSK	1	1	25.64	24.94	24.12
				1	26	25.20	24.56	24.45
				1	49	25.21	24.27	24.80
				25	0	25.12	24.23	23.54
				25	13	25.55	24.54	24.31
				25	26	25.02	23.90	24.01
				50	0	25.05	24.09	23.91
			QPSK	L / M Channel 1/1 H Channel 1/49		25.57	24.86	24.76
			16QAM			24.60	23.90	23.98
			64QAM			23.14	22.78	23.19
		CP	QPSK			23.97	23.08	23.30

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						647668	656000	664332
						3715.02 MHz	3840 MHz	3964.98 MHz
30MHz	30	DFT-s	pi/2 BPSK	1	1	25.10	24.92	24.01
				1	39	24.97	24.38	24.27
				1	76	24.99	24.05	24.92
				36	0	24.48	24.15	23.55
				36	21	24.92	24.39	24.25
				36	42	24.43	23.64	24.06
				75	0	24.48	23.92	23.75
			QPSK	L / M Channel 1/1 H Channel 1/76		24.97	24.82	24.86
			16QAM			24.04	23.83	24.03
			64QAM			22.56	22.32	22.35
		CP	QPSK			23.30	23.11	23.25

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						648000	656000	664000
						3720 MHz	3840 MHz	3960 MHz
40MHz	30	DFT-s	pi/2 BPSK	1	1	25.26	25.00	24.05
				1	53	25.19	24.54	24.10
				1	104	25.06	24.13	25.00
				50	0	24.73	24.44	23.52
				50	28	25.15	24.56	24.04
				50	56	24.60	23.79	24.00
				100	0	24.68	24.15	23.50
			QPSK	L / M Channel 1/1 H Channel 1/104		25.23	25.17	24.80
			16QAM			24.27	24.18	23.98
			64QAM			23.30	23.08	23.40
		CP	QPSK			23.55	23.37	23.15

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						648334	656000	663666
						3725.1 MHz	3840 MHz	3954.99 MHz
50MHz	30	DFT-s	pi/2 BPSK	1	1	25.52	25.34	24.35
				1	61	25.33	24.59	24.39
				1	131	25.16	24.36	25.10
				64	0	24.99	24.55	23.53
				64	35	25.35	24.57	24.07
				64	69	24.78	24.00	23.96
				128	0	24.95	24.35	23.61
			QPSK	L / M Channel 1/1 H Channel 1/131		25.51	25.15	25.05
			16QAM			24.58	24.50	24.29
			64QAM			23.12	22.93	23.20
		CP	QPSK			23.99	23.58	23.35

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						648668	656000	663332
						3730.02 MHz	3840 MHz	3949.98 MHz
60MHz	30	DFT-s	pi/2 BPSK	1	1	25.57	25.47	24.36
				1	81	25.42	24.49	24.36
				1	160	25.02	24.37	25.34
				81	0	24.97	24.60	23.20
				81	41	25.41	24.59	24.10
				81	81	24.76	24.11	24.17
				162	0	24.96	24.28	23.89
			QPSK	L / M Channel 1/1 H Channel 1/160		25.47	25.40	25.27
			16QAM			24.51	24.57	24.54
			64QAM			23.19	23.09	23.45
		CP	QPSK			23.00	23.76	23.43

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						649000	656000	663000
						3735 MHz	3840 MHz	3945 MHz
70MHz	30	DFT-s	pi/2 BPSK	1	1	25.33	25.35	24.91
				1	94	25.06	24.37	24.42
				1	187	24.77	24.25	25.33
				90	0	24.76	24.49	23.67
				90	45	25.13	24.45	24.06
				90	99	24.49	23.60	24.09
				180	0	24.69	24.16	23.87
			QPSK	L / M Channel 1/1 H Channel 1/187		25.32	25.32	25.24
			16QAM			24.37	24.33	24.50
			64QAM			22.91	22.94	23.46
		CP	QPSK			23.56	23.40	23.49

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						649334	656000	662666
						3740.01 MHz	3840 MHz	3939.99 MHz
80MHz	30	DFT-s	pi/2 BPSK	1	1	25.62	25.54	24.80
				1	109	25.31	24.46	24.53
				1	215	24.84	24.56	25.42
				108	0	24.97	24.66	23.70
				108	55	25.30	24.53	24.00
				108	109	24.57	24.20	24.30
				216	0	24.90	24.60	24.20
			QPSK	L/M Channel 1/1 H Channel 1/215		25.53	25.54	25.33
			16QAM			24.55	24.59	24.56
			64QAM			23.21	23.15	23.50
		CP	QPSK			23.90	23.70	23.43

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						649668	656000	662332
						3745.02 MHz	3840 MHz	3934.98 MHz
90MHz	30	DFT-s	pi/2 BPSK	1	1	25.64	25.58	24.97
				1	122	25.19	24.77	24.75
				1	243	24.74	24.85	25.27
				125	0	24.97	24.72	24.09
				125	60	24.68	24.09	24.02
				125	120	24.42	23.89	23.93
				243	0	24.89	24.44	24.11
			QPSK	L / M Channel 1/1 H Channel 1/243		25.59	25.57	25.25
			16QAM			24.65	24.59	24.53
			64QAM			23.19	23.16	22.78
		CP	QPSK			23.95	23.93	23.68

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						650000	656000	662000
						3750 MHz	3840 MHz	3930 MHz
100MHz	30	DFT-s	pi/2 BPSK	1	1	25.57	25.53	24.98
				1	137	25.15	24.84	24.92
				1	271	24.94	24.95	25.28
				135	0	24.92	24.72	24.05
				135	69	25.11	24.50	24.02
				135	138	24.33	23.88	23.81
				270	0	24.82	24.45	24.06
			QPSK	L / M Channel 1/1 H Channel 1/271		25.52	25.52	25.26
			16QAM			24.65	24.67	24.39
			64QAM			23.07	23.17	22.91
		CP	QPSK			23.88	23.78	23.50

9.1.2 MIMO

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						647334	656000	664666
						3710.01 MHz	3840 MHz	3969.99MHz
20MHz	30	CP	QPSK	1	1	24.82	24.67	24.49
				1	26	24.65	24.56	24.40
				1	49	24.68	24.57	24.49
				25	0	23.23	23.19	22.92
				25	13	24.65	24.58	24.40
				25	26	23.20	23.17	22.97
				51	0	23.21	23.20	22.93
			16QAM	1	1	24.28	24.20	23.97
			64QAM	1	1	22.74	22.62	22.24

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						647668	656000	664332
						3715.02 MHz	3840 MHz	3964.98 MHz
30MHz	30	CP	QPSK	1	1	24.70	24.66	24.35
				1	39	24.54	24.65	24.33
				1	76	24.75	24.71	24.58
				36	0	23.17	23.28	22.83
				36	21	24.69	24.67	24.45
				36	42	23.17	23.14	23.06
				78	0	23.25	23.24	22.96
			16QAM	1	1	24.29	24.35	23.91
			64QAM	1	1	22.68	22.56	22.33

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						648000	656000	664000
						3720 MHz	3840 MHz	3960 MHz
40MHz	30	CP	QPSK	1	1	24.88	24.83	24.45
				1	53	24.64	24.66	24.54
				1	104	24.85	24.62	24.55
				50	0	23.32	23.12	22.69
				50	28	24.66	24.54	24.25
				50	56	23.31	23.23	22.93
				106	0	23.29	23.23	22.88
			16QAM	1	1	24.44	24.40	23.70
			64QAM	1	1	22.75	22.68	22.04

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						648334	656000	663666
						3725.1 MHz	3840 MHz	3954.99 MHz
50MHz	30	CP	QPSK	1	1	24.63	24.54	24.21
				1	66	24.53	24.48	24.34
				1	131	24.52	24.65	24.44
				64	0	23.12	23.15	22.51
				64	35	24.53	24.56	24.16
				64	69	23.09	23.13	22.85
				133	0	23.00	22.61	22.70
			16QAM	1	1	24.07	24.24	23.60
			64QAM	1	1	22.61	22.44	21.89

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						648668	656000	663332
						3730.02 MHz	3840 MHz	3949.98 MHz
60MHz	30	CP	QPSK	1	1	24.66	24.79	24.55
				1	81	24.72	24.62	24.54
				1	160	24.82	24.78	24.73
				81	0	23.22	23.32	22.89
				81	41	24.66	24.60	24.26
				81	81	23.19	23.27	23.05
				162	0	23.29	23.25	22.99
			16QAM	1	1	24.34	24.44	24.00
			64QAM	1	1	22.65	22.75	22.31

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						649000	656000	663000
						3735 MHz	3840 MHz	3945 MHz
70MHz	30	CP	QPSK	1	1	24.66	24.67	24.48
				1	94	24.59	24.58	24.41
				1	187	24.79	24.78	24.70
				90	0	23.17	23.11	22.82
				90	45	24.66	24.69	24.22
				90	99	23.18	23.24	23.03
				189	0	23.11	23.10	22.99
			16QAM	1	1	24.24	24.41	24.14
			64QAM	1	1	22.55	22.67	22.47

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						649334	656000	662666
						3740.01 MHz	3840 MHz	3939.99 MHz
80MHz	30	CP	QPSK	1	1	24.73	24.82	24.70
				1	109	24.71	24.61	24.48
				1	215	24.83	24.77	24.62
				108	0	23.15	23.20	22.82
				108	55	24.59	24.57	24.28
				108	109	23.25	23.22	22.81
				217	0	23.22	23.27	22.95
			16QAM	1	1	24.33	24.36	24.37
			64QAM	1	1	22.62	22.79	22.60

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						649668	656000	662332
						3745.02 MHz	3840 MHz	3934.98 MHz
90MHz	30	CP	QPSK	1	1	24.72	24.78	24.86
				1	122	24.60	24.64	24.40
				1	243	24.84	24.91	24.78
				125	0	23.15	23.21	23.11
				125	60	23.16	23.15	22.94
				125	120	23.27	23.24	23.00
				245	0	23.17	23.25	23.02
			16QAM	1	1	24.32	24.40	24.49
			64QAM	1	1	22.69	22.81	22.71

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						650000	656000	662000
						3750 MHz	3840 MHz	3930 MHz
100MHz	30	CP	QPSK	1	1	24.70	24.81	24.72
				1	137	24.76	24.65	24.55
				1	271	24.92	24.96	24.76
				135	0	23.12	23.26	23.15
				135	69	24.66	24.67	24.30
				135	138	23.33	23.28	22.99
				273	0	23.32	23.23	22.95
			16QAM	1	1	24.31	24.30	24.38
			64QAM	1	1	22.61	22.75	22.62

9.2 EQUIVALENT ISOTROPIC RADIATED POWER

9.2.1 External Antenna_SISO

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBµV)	A.F+C.L+D.F (dB/m)	Total (dBµV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3710.01	Sub6 n77(78)/ 20 MHz [30 kHz]	PI/2 BPSK	81.80	38.54	120.34	V	< 1.00	0.327	25.14	1	1
		QPSK	81.79	38.54	120.33	V		0.326	25.13		
		16-QAM	80.77	38.54	119.31	V		0.258	24.11		
		64-QAM	80.30	38.54	118.84	V		0.231	23.64		
3840.00		PI/2 BPSK	80.49	39.22	119.71	V		0.283	24.51	1	1
		QPSK	80.29	39.22	119.51	V		0.270	24.31		
		16-QAM	79.49	39.22	118.71	V		0.224	23.51		
		64-QAM	78.89	39.22	118.11	V		0.196	22.91		
3969.99		PI/2 BPSK	80.51	39.43	119.94	V		0.298	24.74	1	25
		QPSK	80.34	39.43	119.77	V		0.286	24.57		
		16-QAM	79.44	39.43	118.87	V		0.233	23.67		
		64-QAM	78.44	39.43	117.87	V		0.185	22.67		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBµV)	A.F+C.L+D.F (dB/m)	Total (dBµV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3715.02	Sub6 n77(78)/ 30 MHz [30 kHz]	PI/2 BPSK	82.19	38.90	121.09	V	< 1.00	0.388	25.89	1	1
		QPSK	81.84	38.90	120.74	V		0.358	25.54		
		16-QAM	80.89	38.90	119.79	V		0.288	24.59		
		64-QAM	79.39	38.90	118.29	V		0.204	23.09		
3840.00		PI/2 BPSK	80.93	39.22	120.15	V		0.313	24.95	1	1
		QPSK	80.89	39.22	120.11	V		0.310	24.91		
		16-QAM	79.84	39.22	119.06	V		0.243	23.86		
		64-QAM	78.24	39.22	117.46	V		0.168	22.26		
3964.98		PI/2 BPSK	81.09	39.42	120.51	V		0.340	25.31	1	1
		QPSK	80.99	39.42	120.41	V		0.332	25.21		
		16-QAM	79.79	39.42	119.21	V		0.252	24.01		
		64-QAM	78.49	39.42	117.91	V		0.187	22.71		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3720.00	Sub6 n77(78)/ 40 MHz [30 kHz]	PI/2 BPSK	81.99	38.60	120.59	V	< 1.00	0.346	25.39	1	1
		QPSK	81.94	38.60	120.54	V		0.342	25.34		
		16-QAM	80.88	38.60	119.48	V		0.268	24.28		
		64-QAM	80.34	38.60	118.94	V		0.237	23.74		
3840.00		PI/2 BPSK	81.34	39.22	120.56	V		0.344	25.36	1	1
		QPSK	81.15	39.22	120.37	V		0.329	25.17		
		16-QAM	80.17	39.22	119.39	V		0.262	24.19		
		64-QAM	79.52	39.22	118.74	V		0.226	23.54		
3960.00		PI/2 BPSK	81.29	39.38	120.67	V		0.352	25.47	1	53
		QPSK	81.19	39.38	120.57	V		0.344	25.37		
		16-QAM	80.34	39.38	119.72	V		0.283	24.52		
		64-QAM	79.09	39.38	118.47	V		0.212	23.27		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3725.10	Sub6 n77(78)/ 50 MHz [30 kHz]	PI/2 BPSK	82.24	38.61	120.85	V	< 1.00	0.367	25.65	1	1
		QPSK	81.99	38.61	120.60	V		0.346	25.40		
		16-QAM	81.09	38.61	119.70	V		0.282	24.50		
		64-QAM	80.09	38.61	118.70	V		0.224	23.50		
3840.00		PI/2 BPSK	81.59	39.22	120.81	V		0.364	25.61	1	1
		QPSK	81.57	39.22	120.79	V		0.362	25.59		
		16-QAM	80.78	39.22	120.00	V		0.302	24.80		
		64-QAM	79.77	39.22	118.99	V		0.239	23.79		
3954.99		PI/2 BPSK	81.74	39.27	121.01	V		0.381	25.81	1	66
		QPSK	81.59	39.27	120.86	V		0.368	25.66		
		16-QAM	80.59	39.27	119.86	V		0.293	24.66		
		64-QAM	79.68	39.27	118.95	V		0.237	23.75		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3730.02	Sub6 n77(78)/ 60 MHz [30 kHz]	PI/2 BPSK	82.04	38.48	120.52	V	< 1.00	0.340	25.32	1	1
		QPSK	81.95	38.48	120.43	V		0.333	25.23		
		16-QAM	80.95	38.48	119.43	V		0.265	24.23		
		64-QAM	79.69	38.48	118.17	V		0.198	22.97		
3840.00		PI/2 BPSK	81.54	39.22	120.76	V		0.360	25.56	1	1
		QPSK	81.50	39.22	120.72	V		0.357	25.52		
		16-QAM	80.29	39.22	119.51	V		0.270	24.31		
		64-QAM	79.48	39.22	118.70	V		0.224	23.50		
3949.98		PI/2 BPSK	82.09	39.40	121.49	V		0.426	26.29	1	81
		QPSK	81.97	39.40	121.37	V		0.414	26.17		
		16-QAM	81.18	39.40	120.58	V		0.345	25.38		
		64-QAM	79.99	39.40	119.39	V		0.262	24.19		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3735.00	Sub6 n77(78)/ 70 MHz [30 kHz]	PI/2 BPSK	82.09	39.02	121.11	V	< 1.00	0.390	25.91	1	1
		QPSK	82.04	39.02	121.06	V		0.385	25.86		
		16-QAM	80.99	39.02	120.01	V		0.303	24.81		
		64-QAM	79.94	39.02	118.96	V		0.238	23.76		
3840.00		PI/2 BPSK	81.73	39.22	120.95	V		0.376	25.75	1	1
		QPSK	81.69	39.22	120.91	V		0.373	25.71		
		16-QAM	80.82	39.22	120.04	V		0.305	24.84		
		64-QAM	79.69	39.22	118.91	V		0.235	23.71		
3945.00		PI/2 BPSK	81.57	39.38	120.95	V		0.376	25.75	1	94
		QPSK	81.50	39.38	120.88	V		0.370	25.68		
		16-QAM	80.69	39.38	120.07	V		0.307	24.87		
		64-QAM	79.59	39.38	118.97	V		0.238	23.77		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3740.01	Sub6 n77(78)/ 80 MHz [30 kHz]	PI/2 BPSK	82.02	38.82	120.84	V	< 1.00	0.366	25.64	1	1
		QPSK	82.00	38.82	120.82	V		0.365	25.62		
		16-QAM	80.97	38.82	119.79	V		0.288	24.59		
		64-QAM	79.95	38.82	118.77	V		0.227	23.57		
3840.00		PI/2 BPSK	81.89	39.22	121.11	V		0.390	25.91	1	1
		QPSK	81.78	39.22	121.00	V		0.380	25.80		
		16-QAM	80.89	39.22	120.11	V		0.310	24.91		
		64-QAM	79.69	39.22	118.91	V		0.235	23.71		
3939.99		PI/2 BPSK	81.69	39.38	121.07	V		0.386	25.87	1	108
		QPSK	81.59	39.38	120.97	V		0.377	25.77		
		16-QAM	80.57	39.38	119.95	V		0.298	24.75		
		64-QAM	79.59	39.38	118.97	V		0.238	23.77		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3745.02	Sub6 n77(78)/ 90 MHz [30 kHz]	PI/2 BPSK	82.11	39.04	121.15	V	< 1.00	0.394	25.95	1	1
		QPSK	81.97	39.04	121.01	V		0.381	25.81		
		16-QAM	81.09	39.04	120.13	V		0.311	24.93		
		64-QAM	79.49	39.04	118.53	V		0.215	23.33		
3840.00		PI/2 BPSK	81.84	39.22	121.06	V		0.386	25.86	1	1
		QPSK	81.74	39.22	120.96	V		0.377	25.76		
		16-QAM	81.00	39.22	120.22	V		0.318	25.02		
		64-QAM	79.19	39.22	118.41	V		0.210	23.21		
3934.98		PI/2 BPSK	81.29	39.53	120.82	V		0.365	25.62	1	122
		QPSK	80.99	39.53	120.52	V		0.341	25.32		
		16-QAM	80.11	39.53	119.64	V		0.278	24.44		
		64-QAM	78.49	39.53	118.02	V		0.192	22.82		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3750.00	Sub6 n77(78)/ 100 MHz [30 kHz]	PI/2 BPSK	81.99	38.91	120.90	V	< 1.00	0.372	25.70	1	1
		QPSK	81.93	38.91	120.84	V		0.366	25.64		
		16-QAM	81.02	38.91	119.93	V		0.297	24.73		
		64-QAM	79.49	38.91	118.40	V		0.209	23.20		
3840.00		PI/2 BPSK	81.59	39.22	120.81	V		0.364	25.61	1	1
		QPSK	81.49	39.22	120.71	V		0.356	25.51		
		16-QAM	80.70	39.22	119.92	V		0.297	24.72		
		64-QAM	78.99	39.22	118.21	V		0.200	23.01		
3930.00		PI/2 BPSK	81.09	39.34	120.43	V		0.334	25.23	1	271
		QPSK	80.97	39.34	120.31	V		0.325	25.11		
		16-QAM	79.99	39.34	119.33	V		0.259	24.13		
		64-QAM	78.54	39.34	117.88	V		0.186	22.68		

9.2.2 External Antenna_MIMO

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBµV)	A.F+C.L+D.F (dB/m)	Total (dBµV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3710.01	Sub6 n77(78)/ 20 MHz [30 kHz]	QPSK	81.61	38.54	120.15	V	< 1.00	0.313	24.95	1	1
		16-QAM	80.89	38.54	119.43	V		0.265	24.23		
		64-QAM	79.29	38.54	117.83	V		0.183	22.63		
3840.00		QPSK	82.59	39.22	121.81	V		0.458	26.61	1	1
		16-QAM	81.39	39.22	120.61	V		0.348	25.41		
		64-QAM	80.14	39.22	119.36	V		0.261	24.16		
3969.99		QPSK	82.99	39.43	122.42	V		0.527	27.22	1	1
		16-QAM	82.09	39.43	121.52	V		0.429	26.32		
		64-QAM	81.00	39.43	120.43	V		0.333	25.23		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBµV)	A.F+C.L+D.F (dB/m)	Total (dBµV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3715.02	Sub6 n77(78)/ 30 MHz [30 kHz]	QPSK	81.59	38.90	120.49	V	< 1.00	0.338	25.29	1	1
		16-QAM	80.85	38.90	119.75	V		0.285	24.55		
		64-QAM	79.40	38.90	118.30	V		0.204	23.10		
3840.00		QPSK	82.71	39.22	121.93	V		0.471	26.73	1	1
		16-QAM	82.37	39.22	121.59	V		0.436	26.39		
		64-QAM	80.68	39.22	119.90	V		0.295	24.70		
3964.98		QPSK	82.69	39.42	122.11	V		0.491	26.91	1	39
		16-QAM	82.29	39.42	121.71	V		0.448	26.51		
		64-QAM	80.41	39.42	119.83	V		0.291	24.63		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3720.00	Sub6 n77(78)/ 40 MHz [30 kHz]	QPSK	81.85	38.60	120.45	V	< 1.00	0.335	25.25	1	1
		16-QAM	81.40	38.60	120.00	V		0.302	24.80		
		64-QAM	79.09	38.60	117.69	V		0.177	22.49		
3840.00		QPSK	82.76	39.22	121.98	V		0.477	26.78	1	1
		16-QAM	82.48	39.22	121.70	V		0.447	26.50		
		64-QAM	80.89	39.22	120.11	V		0.310	24.91		
3960.00		QPSK	82.69	39.38	122.07	V		0.486	26.87	1	53
		16-QAM	81.95	39.38	121.33	V		0.410	26.13		
		64-QAM	80.79	39.38	120.17	V		0.314	24.97		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3725.10	Sub6 n77(78)/ 50 MHz [30 kHz]	QPSK	81.39	38.61	120.00	V	< 1.00	0.302	24.80	1	1
		16-QAM	80.89	38.61	119.50	V		0.269	24.30		
		64-QAM	79.29	38.61	117.90	V		0.186	22.70		
3840.00		QPSK	82.80	39.22	122.02	V		0.481	26.82	1	1
		16-QAM	82.32	39.22	121.54	V		0.431	26.34		
		64-QAM	82.40	39.22	121.62	V		0.439	26.42		
3954.99		QPSK	82.51	39.27	121.78	V		0.456	26.58	1	66
		16-QAM	81.59	39.27	120.86	V		0.368	25.66		
		64-QAM	80.41	39.27	119.68	V		0.281	24.48		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3730.02	Sub6 n77(78)/ 60 MHz [30 kHz]	QPSK	81.34	38.48	119.82	V	< 1.00	0.290	24.62	1	1
		16-QAM	80.98	38.48	119.46	V		0.267	24.26		
		64-QAM	79.00	38.48	117.48	V		0.169	22.28		
3840.00		QPSK	82.98	39.22	122.20	V		0.501	27.00	1	1
		16-QAM	82.40	39.22	121.62	V		0.439	26.42		
		64-QAM	80.59	39.22	119.81	V		0.289	24.61		
3949.98		QPSK	82.61	39.40	122.01	V		0.480	26.81	1	81
		16-QAM	81.91	39.40	121.31	V		0.408	26.11		
		64-QAM	80.42	39.40	119.82	V		0.290	24.62		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3735.00	Sub6 n77(78)/ 70 MHz [30 kHz]	QPSK	81.10	39.02	120.12	V	< 1.00	0.310	24.92	1	1
		16-QAM	80.69	39.02	119.71	V		0.282	24.51		
		64-QAM	79.19	39.02	118.21	V		0.200	23.01		
3840.00		QPSK	82.53	39.22	121.75	V		0.452	26.55	1	1
		16-QAM	82.40	39.22	121.62	V		0.439	26.42		
		64-QAM	80.09	39.22	119.31	V		0.258	24.11		
3945.00		QPSK	82.32	39.38	121.70	V		0.447	26.50	1	94
		16-QAM	82.18	39.38	121.56	V		0.432	26.36		
		64-QAM	80.32	39.38	119.70	V		0.282	24.50		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3740.01	Sub6 n77(78)/ 80 MHz [30 kHz]	QPSK	81.19	38.82	120.01	V	< 1.00	0.303	24.81	1	1
		16-QAM	81.14	38.82	119.96	V		0.299	24.76		
		64-QAM	78.99	38.82	117.81	V		0.182	22.61		
3840.00		QPSK	82.40	39.22	121.62	V		0.439	26.42	1	1
		16-QAM	81.79	39.22	121.01	V		0.381	25.81		
		64-QAM	79.92	39.22	119.14	V		0.248	23.94		
3939.99		QPSK	81.72	39.38	121.10	V		0.389	25.90	1	108
		16-QAM	81.59	39.38	120.97	V		0.377	25.77		
		64-QAM	79.52	39.38	118.90	V		0.234	23.70		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3745.02	Sub6 n77(78)/ 90 MHz [30 kHz]	QPSK	81.49	39.04	120.53	V	< 1.00	0.341	25.33	1	1
		16-QAM	80.57	39.04	119.61	V		0.276	24.41		
		64-QAM	79.19	39.04	118.23	V		0.201	23.03		
3840.00		QPSK	82.09	39.22	121.31	V		0.408	26.11	1	1
		16-QAM	81.76	39.22	120.98	V		0.378	25.78		
		64-QAM	79.69	39.22	118.91	V		0.235	23.71		
3934.98		QPSK	81.65	39.53	121.18	V		0.396	25.98	1	122
		16-QAM	80.79	39.53	120.32	V		0.325	25.12		
		64-QAM	79.40	39.53	118.93	V		0.236	23.73		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3750.00	Sub6 n77(78)/ 100 MHz [30 kHz]	QPSK	81.35	38.91	120.26	V	< 1.00	0.321	25.06	1	1
		16-QAM	81.09	38.91	120.00	V		0.302	24.80		
		64-QAM	79.00	38.91	117.91	V		0.187	22.71		
3840.00		QPSK	81.69	39.22	120.91	V		0.373	25.71	1	1
		16-QAM	81.49	39.22	120.71	V		0.356	25.51		
		64-QAM	78.99	39.22	118.21	V		0.200	23.01		
3930.00		QPSK	81.64	39.34	120.98	V		0.378	25.78	1	136
		16-QAM	80.99	39.34	120.33	V		0.326	25.13		
		64-QAM	79.69	39.34	119.03	V		0.242	23.83		

9.2.3 Internal Antenna_SISO

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBµV)	A.F+C.L+D.F (dB/m)	Total (dBµV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3710.01	Sub6 n77(78)/ 20 MHz [30 kHz]	PI/2 BPSK	83.64	38.54	122.18	H	< 1.00	0.499	26.98	1	1
		QPSK	83.61	38.54	122.15	H		0.495	26.95		
		16-QAM	82.78	38.54	121.32	H		0.409	26.12		
		64-QAM	82.35	38.54	120.89	H		0.371	25.69		
3840.00		PI/2 BPSK	81.61	39.22	120.83	H		0.366	25.63	1	1
		QPSK	81.50	39.22	120.72	H		0.357	25.52		
		16-QAM	80.61	39.22	119.83	H		0.291	24.63		
		64-QAM	80.01	39.22	119.23	H		0.253	24.03		
3969.99		PI/2 BPSK	80.89	39.43	120.32	V		0.325	25.12	1	1
		QPSK	80.85	39.43	120.28	V		0.322	25.08		
		16-QAM	79.89	39.43	119.32	V		0.258	24.12		
		64-QAM	79.39	39.43	118.82	V		0.230	23.62		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBµV)	A.F+C.L+D.F (dB/m)	Total (dBµV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3715.02	Sub6 n77(78)/ 30 MHz [30 kHz]	PI/2 BPSK	83.48	38.90	122.38	H	< 1.00	0.522	27.18	1	1
		QPSK	83.46	38.90	122.36	H		0.520	27.16		
		16-QAM	82.46	38.90	121.36	H		0.413	26.16		
		64-QAM	81.04	38.90	119.94	H		0.298	24.74		
3840.00		PI/2 BPSK	81.79	39.22	121.01	H		0.381	25.81	1	76
		QPSK	81.77	39.22	120.99	H		0.379	25.79		
		16-QAM	80.71	39.22	119.93	H		0.297	24.73		
		64-QAM	79.09	39.22	118.31	H		0.205	23.11		
3964.98		PI/2 BPSK	81.38	39.42	120.80	V		0.363	25.60	1	1
		QPSK	81.33	39.42	120.75	V		0.359	25.55		
		16-QAM	80.32	39.42	119.74	V		0.285	24.54		
		64-QAM	78.83	39.42	118.25	V		0.202	23.05		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3720.00	Sub6 n77(78)/ 40 MHz [30 kHz]	PI/2 BPSK	83.74	38.60	122.34	H	< 1.00	0.517	27.14	1	1
		QPSK	83.72	38.60	122.32	H		0.515	27.12		
		16-QAM	82.82	38.60	121.42	H		0.419	26.22		
		64-QAM	82.19	38.60	120.79	H		0.362	25.59		
3840.00		PI/2 BPSK	81.84	39.22	121.06	H		0.386	25.86	1	104
		QPSK	81.79	39.22	121.01	H		0.381	25.81		
		16-QAM	80.82	39.22	120.04	H		0.305	24.84		
		64-QAM	80.22	39.22	119.44	H		0.266	24.24		
3960.00		PI/2 BPSK	81.83	39.38	121.21	V		0.399	26.01	1	1
		QPSK	81.71	39.38	121.09	V		0.388	25.89		
		16-QAM	80.78	39.38	120.16	V		0.313	24.96		
		64-QAM	80.23	39.38	119.61	V		0.276	24.41		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3725.10	Sub6 n77(78)/ 50 MHz [30 kHz]	PI/2 BPSK	84.22	38.61	122.83	H	< 1.00	0.579	27.63	1	1
		QPSK	84.06	38.61	122.67	H		0.558	27.47		
		16-QAM	83.24	38.61	121.85	H		0.462	26.65		
		64-QAM	82.19	38.61	120.80	H		0.363	25.60		
3840.00		PI/2 BPSK	82.15	39.22	121.37	H		0.414	26.17	1	131
		QPSK	82.07	39.22	121.29	H		0.407	26.09		
		16-QAM	81.21	39.22	120.43	H		0.334	25.23		
		64-QAM	80.06	39.22	119.28	H		0.256	24.08		
3954.99		PI/2 BPSK	82.42	39.27	121.69	V		0.446	26.49	1	1
		QPSK	82.29	39.27	121.56	V		0.433	26.36		
		16-QAM	81.43	39.27	120.70	V		0.355	25.50		
		64-QAM	80.23	39.27	119.50	V		0.269	24.30		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3730.02	Sub6 n77(78)/ 60 MHz [30 kHz]	PI/2 BPSK	84.24	38.48	122.72	H	< 1.00	0.565	27.52	1	1
		QPSK	84.23	38.48	122.71	H		0.564	27.51		
		16-QAM	83.38	38.48	121.86	H		0.463	26.66		
		64-QAM	82.35	38.48	120.83	H		0.366	25.63		
3840.00		PI/2 BPSK	82.31	39.22	121.53	H		0.430	26.33	1	1
		QPSK	82.25	39.22	121.47	H		0.424	26.27		
		16-QAM	81.36	39.22	120.58	H		0.345	25.38		
		64-QAM	80.35	39.22	119.57	H		0.274	24.37		
3949.98		PI/2 BPSK	82.83	39.40	122.23	V		0.505	27.03	1	1
		QPSK	82.69	39.40	122.09	V		0.489	26.89		
		16-QAM	81.82	39.40	121.22	V		0.400	26.02		
		64-QAM	80.72	39.40	120.12	V		0.311	24.92		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3735.00	Sub6 n77(78)/ 70 MHz [30 kHz]	PI/2 BPSK	83.80	39.02	122.82	H	< 1.00	0.578	27.62	1	1
		QPSK	83.71	39.02	122.73	H		0.566	27.53		
		16-QAM	82.81	39.02	121.83	H		0.460	26.63		
		64-QAM	81.78	39.02	120.80	H		0.363	25.60		
3840.00		PI/2 BPSK	82.46	39.22	121.68	H		0.445	26.48	1	1
		QPSK	82.41	39.22	121.63	H		0.440	26.43		
		16-QAM	81.38	39.22	120.60	H		0.347	25.40		
		64-QAM	80.44	39.22	119.66	H		0.279	24.46		
3945.00		PI/2 BPSK	83.18	39.38	122.56	V		0.544	27.36	1	1
		QPSK	83.02	39.38	122.40	V		0.525	27.20		
		16-QAM	82.10	39.38	121.48	V		0.425	26.28		
		64-QAM	81.15	39.38	120.53	V		0.341	25.33		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3740.01	Sub6 n77(78)/ 80 MHz [30 kHz]	PI/2 BPSK	83.98	38.82	122.80	H	< 1.00	0.575	27.60	1	1
		QPSK	83.87	38.82	122.69	H		0.561	27.49		
		16-QAM	83.08	38.82	121.90	H		0.468	26.70		
		64-QAM	82.02	38.82	120.84	H		0.366	25.64		
3840.00		PI/2 BPSK	82.43	39.22	121.65	H		0.442	26.45	1	1
		QPSK	82.37	39.22	121.59	H		0.436	26.39		
		16-QAM	81.52	39.22	120.74	H		0.358	25.54		
		64-QAM	80.41	39.22	119.63	H		0.277	24.43		
3939.99		PI/2 BPSK	83.39	39.38	122.77	V		0.571	27.57	1	1
		QPSK	83.34	39.38	122.72	V		0.565	27.52		
		16-QAM	82.42	39.38	121.80	V		0.457	26.60		
		64-QAM	81.45	39.38	120.83	V		0.366	25.63		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3745.02	Sub6 n77(78)/ 90 MHz [30 kHz]	PI/2 BPSK	83.55	39.04	122.59	H	< 1.00	0.548	27.39	1	1
		QPSK	83.49	39.04	122.53	H		0.541	27.33		
		16-QAM	82.60	39.04	121.64	H		0.441	26.44		
		64-QAM	81.17	39.04	120.21	H		0.317	25.01		
3840.00		PI/2 BPSK	82.12	39.22	121.34	H		0.411	26.14	1	1
		QPSK	81.93	39.22	121.15	H		0.394	25.95		
		16-QAM	81.06	39.22	120.28	H		0.322	25.08		
		64-QAM	79.52	39.22	118.74	H		0.226	23.54		
3934.98		PI/2 BPSK	83.72	39.53	123.25	V		0.638	28.05	1	1
		QPSK	83.71	39.53	123.24	V		0.637	28.04		
		16-QAM	82.66	39.53	122.19	V		0.500	26.99		
		64-QAM	81.15	39.53	120.68	V		0.353	25.48		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3750.00	Sub6 n77(78)/ 100 MHz [30 kHz]	PI/2 BPSK	83.56	38.91	122.47	H	< 1.00	0.533	27.27	1	1
		QPSK	83.53	38.91	122.44	H		0.530	27.24		
		16-QAM	82.64	38.91	121.55	H		0.432	26.35		
		64-QAM	81.25	38.91	120.16	H		0.313	24.96		
3840.00		PI/2 BPSK	82.26	39.22	121.48	H		0.425	26.28	1	1
		QPSK	82.25	39.22	121.47	H		0.424	26.27		
		16-QAM	81.31	39.22	120.53	H		0.341	25.33		
		64-QAM	79.78	39.22	119.00	H		0.240	23.80		
3930.00		PI/2 BPSK	84.07	39.34	123.41	V		0.662	28.21	1	1
		QPSK	83.95	39.34	123.29	V		0.644	28.09		
		16-QAM	82.99	39.34	122.33	V		0.516	27.13		
		64-QAM	81.59	39.34	120.93	V		0.374	25.73		

9.2.4 Internal Antenna_MIMO

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBµV)	A.F+C.L+D.F (dB/m)	Total (dBµV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3710.01	Sub6 n77(78)/ 20 MHz [30 kHz]	QPSK	85.67	0.99	124.21	V	< 1.00	0.796	29.01	1	49
		16-QAM	85.39	1.27	123.93	V		0.746	28.73		
		64-QAM	83.74	2.92	122.28	V		0.511	27.08		
3840.00		QPSK	84.98	1.00	124.20	V		0.795	29.00	1	1
		16-QAM	84.67	1.31	123.89	V		0.740	28.69		
		64-QAM	83.01	2.97	122.23	V		0.505	27.03		
3969.99		QPSK	83.08	2.70	122.51	V		0.538	27.31	1	25
		16-QAM	82.68	3.10	122.11	V		0.490	26.91		
		64-QAM	81.23	4.55	120.66	V		0.351	25.46		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBµV)	A.F+C.L+D.F (dB/m)	Total (dBµV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3715.02	Sub6 n77(78)/ 30 MHz [30 kHz]	QPSK	85.18	1.12	124.08	V	< 1.00	0.774	28.88	1	1
		16-QAM	85.13	1.17	124.03	V		0.765	28.83		
		64-QAM	83.16	3.14	122.06	V		0.486	26.86		
3840.00		QPSK	84.99	0.99	124.21	V		0.796	29.01	1	1
		16-QAM	84.95	1.03	124.17	V		0.789	28.97		
		64-QAM	82.93	3.05	122.15	V		0.495	26.95		
3964.98		QPSK	83.32	2.46	122.74	V		0.568	27.54	1	1
		16-QAM	82.80	2.98	122.22	V		0.504	27.02		
		64-QAM	81.05	4.73	120.47	V		0.337	25.27		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3720.00	Sub6 n77(78)/ 40 MHz [30 kHz]	QPSK	85.35	1.26	123.95	V	< 1.00	0.750	28.75	1	1
		16-QAM	85.29	1.32	123.89	V		0.739	28.69		
		64-QAM	83.31	3.30	121.91	V		0.468	26.71		
3840.00		QPSK	85.35	0.63	124.57	V		0.865	29.37	1	1
		16-QAM	85.11	0.87	124.33	V		0.818	29.13		
		64-QAM	82.96	3.02	122.18	V		0.499	26.98		
3960.00		QPSK	83.53	2.29	122.91	V		0.590	27.71	1	53
		16-QAM	83.16	2.66	122.54	V		0.542	27.34		
		64-QAM	81.68	4.14	121.06	V		0.385	25.86		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3725.10	Sub6 n77(78)/ 50 MHz [30 kHz]	QPSK	83.83	2.76	122.44	V	< 1.00	0.529	27.24	1	132
		16-QAM	83.68	2.91	122.29	V		0.511	27.09		
		64-QAM	83.45	3.14	122.06	V		0.485	26.86		
3840.00		QPSK	85.02	0.96	124.24	V		0.802	29.04	1	66
		16-QAM	84.71	1.27	123.93	V		0.746	28.73		
		64-QAM	83.21	2.77	122.43	V		0.528	27.23		
3954.99		QPSK	83.80	2.13	123.07	V		0.613	27.87	1	66
		16-QAM	83.45	2.48	122.72	V		0.566	27.52		
		64-QAM	81.80	4.13	121.07	V		0.387	25.87		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3730.02	Sub6 n77(78)/ 60 MHz [30 kHz]	QPSK	86.20	0.52	124.68	V	< 1.00	0.887	29.48	1	81
		16-QAM	85.43	1.29	123.91	V		0.743	28.71		
		64-QAM	83.80	2.92	122.28	V		0.511	27.08		
3840.00		QPSK	85.21	0.77	124.43	V		0.838	29.23	1	1
		16-QAM	84.46	1.52	123.68	V		0.705	28.48		
		64-QAM	82.86	3.12	122.08	V		0.488	26.88		
3949.98		QPSK	84.16	1.64	123.56	V		0.686	28.36	1	81
		16-QAM	83.67	2.13	123.07	V		0.613	27.87		
		64-QAM	81.97	3.83	121.37	V		0.414	26.17		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3735.00	Sub6 n77(78)/ 70 MHz [30 kHz]	QPSK	85.42	0.76	124.44	V	< 1.00	0.839	29.24	1	94
		16-QAM	84.86	1.32	123.88	V		0.738	28.68		
		64-QAM	83.26	2.92	122.28	V		0.511	27.08		
3840.00		QPSK	85.11	0.87	124.33	V		0.818	29.13	1	1
		16-QAM	84.56	1.42	123.78	V		0.721	28.58		
		64-QAM	82.95	3.03	122.17	V		0.498	26.97		
3945.00		QPSK	84.32	1.50	123.70	V		0.708	28.50	1	187
		16-QAM	83.87	1.95	123.25	V		0.638	28.05		
		64-QAM	81.87	3.95	121.25	V		0.403	26.05		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3740.01	Sub6 n77(78)/ 80 MHz [30 kHz]	QPSK	85.64	0.74	124.46	V	< 1.00	0.843	29.26	1	108
		16-QAM	85.09	1.29	123.91	V		0.743	28.71		
		64-QAM	83.55	2.83	122.37	V		0.521	27.17		
3840.00		QPSK	85.33	0.65	124.55	V		0.861	29.35	1	1
		16-QAM	85.26	0.72	124.48	V		0.847	29.28		
		64-QAM	83.28	2.70	122.50	V		0.537	27.30		
3939.99		QPSK	84.21	1.61	123.59	V		0.690	28.39	1	108
		16-QAM	83.74	2.08	123.12	V		0.619	27.92		
		64-QAM	82.12	3.70	121.50	V		0.426	26.30		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3745.02	Sub6 n77(78)/ 90 MHz [30 kHz]	QPSK	85.15	1.01	124.19	V	< 1.00	0.792	28.99	1	243
		16-QAM	84.45	1.71	123.49	V		0.674	28.29		
		64-QAM	82.85	3.31	121.89	V		0.467	26.69		
3840.00		QPSK	85.11	0.87	124.33	V		0.818	29.13	1	1
		16-QAM	84.51	1.47	123.73	V		0.713	28.53		
		64-QAM	82.84	3.14	122.06	V		0.485	26.86		
3934.98		QPSK	84.09	1.58	123.62	V		0.695	28.42	1	1
		16-QAM	83.52	2.15	123.05	V		0.610	27.85		
		64-QAM	81.67	4.00	121.20	V		0.398	26.00		

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	Size	Offset
3750.00	Sub6 n77(78)/ 100 MHz [30 kHz]	QPSK	85.02	1.27	123.93	V	< 1.00	0.746	28.73	1	136
		16-QAM	84.48	1.81	123.39	V		0.659	28.19		
		64-QAM	82.91	3.38	121.82	V		0.459	26.62		
3840.00		QPSK	85.32	0.66	124.54	V		0.859	29.34	1	1
		16-QAM	85.16	0.82	124.38	V		0.828	29.18		
		64-QAM	83.17	2.81	122.39	V		0.524	27.19		
3930.00		QPSK	84.61	1.25	123.95	V		0.750	28.75	1	1
		16-QAM	84.00	1.86	123.34	V		0.652	28.14		
		64-QAM	82.53	3.33	121.87	V		0.465	26.67		

9.3 RADIATED SPURIOUS EMISSIONS

9.3.1 External Antenna_SISO

- ▣ NR Band: N77(78)
- ▣ Bandwidth: 60 MHz
- ▣ Modulation: PI/2 BPSK
- ▣ Distance: 3 meters
- ▣ SCS: 30 kHz

Ch	Freq (MHz)	Measured Level (dBµV)	A.F+C.L+D.F+H.P.F -A.G (dB/m)	Total (dBµV/m)	Pol.	Result (dBm)	Limit (dBm)	RB	
								Size	Offset
648668 (3730.020)	7 460.04	71.56	-0.58	70.98	V	-24.22	-13.00	1	1
	11 190.06	66.34	5.47	71.806	H	-23.39	-13.00		
	14 920.08	55.24	8.63	63.867	V	-31.33	-13.00		
656000 (3840.00)	7 680.00	52.34	-0.62	51.7185	V	-43.48	-13.00	1	1
	11 520.00	54.20	5.79	59.992	H	-35.21	-13.00		
	15 360.00	48.67	6.61	55.278	V	-39.92	-13.00		
663332 (3949.98)	7 899.96	50.48	0.09	50.572	V	-44.63	-13.00	1	81
	11 849.94	51.14	4.83	55.969	V	-39.23	-13.00		
	15 799.92	48.09	5.00	53.086	H	-42.11	-13.00		

9.3.2 External Antenna_MIMO

- ▣ NR Band: N77(78)
- ▣ Bandwidth: 20 MHz
- ▣ Modulation: PI/2 BPSK
- ▣ Distance: 3 meters
- ▣ SCS: 30 kHz

Ch	Freq (MHz)	Measured Level (dBμV)	A.F+C.L+D.F+H.P.F -A.G (dB/m)	Total (dBμV/m)	Pol.	Result (dBm)	Limit (dBm)	RB	
								Size	Offset
647334 (3710.01)	7 420.02	73.00	-0.50	72.502	V	-22.70	-13.00	1	1
	11 130.03	67.41	5.60	73.012	V	-22.19	-13.00		
	14 840.04	48.90	9.12	58.022	V	-37.18	-13.00		
656000 (3840.00)	7 680.00	51.94	-0.62	51.319	V	-43.88	-13.00	1	1
	11 520.00	56.44	5.79	62.232	V	-32.97	-13.00		
	15 360.00	48.57	6.61	55.178	V	-40.02	-13.00		
664666 (3969.99)	7 939.98	52.76	0.04	52.800	V	-42.40	-13.00	1	1
	11 909.97	58.74	5.54	64.277	V	-30.92	-13.00		
	15 879.96	48.17	4.96	53.133	V	-42.07	-13.00		

9.3.3 Internal Antenna_SISO

- ▣ NR Band: N77(78)
- ▣ Bandwidth: 100 MHz
- ▣ Modulation: PI/2 BPSK
- ▣ Distance: 3 meters
- ▣ SCS: 30 kHz

Ch	Freq (MHz)	Measured Level (dBµV)	A.F+C.L+D.F+H.P.F -A.G (dB/m)	Total (dBµV/m)	Pol.	Result (dBm)	Limit (dBm)	RB	
								Size	Offset
650000 (3750.00)	7 500.00	53.76	-0.55	53.208	H	-41.99	-13.00	1	1
	11 250.00	49.76	5.61	55.374	H	-39.83	-13.00		
	15 000.00	43.54	8.51	52.050	V	-43.15	-13.00		
356000 (3840.00)	7 680.00	59.85	-0.62	59.229	H	-35.97	-13.00	1	1
	11 520.00	51.82	5.79	57.612	V	-37.59	-13.00		
	15 360.00	43.58	6.61	50.188	H	-45.01	-13.00		
662000 (3930.00)	7 860.00	67.66	-0.18	67.478	H	-27.72	-13.00	1	1
	11 790.00	47.42	4.88	52.304	V	-42.90	-13.00		
	15 720.00	42.61	4.90	47.507	H	-47.69	-13.00		

9.3.4 Internal Antenna_MIMO

- ▣ NR Band: N77(78)
- ▣ Bandwidth: 60 MHz
- ▣ Modulation: PI/2 BPSK
- ▣ Distance: 3 meters
- ▣ SCS: 30 kHz

Ch	Freq (MHz)	Measured Level (dBμV)	A.F+C.L+D.F+H.P.F -A.G (dB/m)	Total (dBμV/m)	Pol.	Result (dBm)	Limit (dBm)	RB	
								Size	Offset
648668 (3730.02)	7 460.04	52.53	-0.58	51.95	V	-43.25	-13.00	1	81
	11 190.06	47.53	5.47	53.00	V	-42.20	-13.00		
	14 920.08	43.81	8.63	52.44	V	-42.76	-13.00		
656000 (3840.00)	7 680.00	58.93	-0.62	58.31	V	-36.89	-13.00	1	1
	11 520.00	45.55	5.79	51.34	V	-43.86	-13.00		
	15 360.00	42.15	6.61	48.76	V	-46.44	-13.00		
663332 (3949.98)	7 899.96	60.72	0.09	60.81	V	-34.39	-13.00	1	81
	11 849.94	42.96	4.83	47.79	V	-47.41	-13.00		
	15 799.92	40.22	5.00	45.22	V	-49.98	-13.00		

9.4 PEAK-TO-AVERAGE RATIO

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (dB)
Sub6 n77(78)	20 MHz	3840.00	BPSK	Full RB	0	4.29
			QPSK			4.91
			16-QAM			5.92
			64-QAM			6.30
	30 MHz		BPSK			4.26
			QPSK			4.70
			16-QAM			5.73
			64-QAM			6.30
	40 MHz		BPSK			4.30
			QPSK			4.75
			16-QAM			5.74
			64-QAM			6.16
	50 MHz		BPSK			4.26
			QPSK			4.82
			16-QAM			5.75
			64-QAM			6.25
	60 MHz		BPSK			4.50
			QPSK			4.91
			16-QAM			5.88
			64-QAM			6.30
	70 MHz		BPSK			4.43
			QPSK			4.87
			16-QAM			5.80
			64-QAM			6.25
	80 MHz		BPSK			4.40
			QPSK			4.88
			16-QAM			5.85
			64-QAM			6.41
	90 MHz		BPSK			4.48
			QPSK			4.93
			16-QAM			5.88
			64-QAM			6.31
	100 MHz		BPSK			4.53
			QPSK			4.96
			16-QAM			5.90
			64-QAM			6.28

Note:

1. Plots of the EUT's Peak- to- Average Ratio are shown Page 400 ~ 435.

9.5 OCCUPIED BANDWIDTH

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (MHz)
Sub6 n77(78)	20 MHz	3840.00	BPSK	Full RB	0	17.928
			QPSK			17.919
			16-QAM			17.923
			64-QAM			17.911
	30 MHz		BPSK			26.824
			QPSK			26.858
			16-QAM			26.856
			64-QAM			26.965
	40 MHz		BPSK			35.831
			QPSK			35.843
			16-QAM			35.831
			64-QAM			35.753
	50 MHz		BPSK			45.872
			QPSK			45.876
			16-QAM			45.811
			64-QAM			45.910
	60 MHz		BPSK			58.139
			QPSK			57.999
			16-QAM			57.949
			64-QAM			57.987
	70 MHz		BPSK			64.829
			QPSK			64.805
			16-QAM			64.686
			64-QAM			64.548
	80 MHz		BPSK			77.322
			QPSK			77.376
			16-QAM			77.481
			64-QAM			77.466
	90 MHz		BPSK			86.983
			QPSK			87.255
			16-QAM			86.818
			64-QAM			87.167
	100 MHz		BPSK			96.570
			QPSK			96.830
			16-QAM			96.907
			64-QAM			96.638

Note:

1. Plots of the EUT's Occupied Bandwidth are shown Page 364 ~ 399.

9.6 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)	20	3710.01	9.9487	37.805	-70.954	-33.149	-13.00
		3840.00	6.0160	37.805	-69.707	-31.902	
		3969.99	9.1476	37.805	-70.485	-32.680	
	30	3715.02	9.0768	37.805	-70.590	-32.785	
		3840.00	8.5783	37.805	-70.734	-32.929	
		3964.98	8.0294	37.805	-70.294	-32.489	
	40	3720.00	8.6431	37.805	-70.135	-32.330	
		3840.00	9.7034	37.805	-70.587	-32.782	
		3960.00	9.1371	37.805	-70.810	-33.005	
	50	3725.01	8.2877	37.805	-70.373	-32.568	
		3840.00	6.0245	37.805	-70.838	-33.033	
		3954.99	8.5962	37.805	-70.578	-32.773	
	60	3730.02	9.7029	37.805	-71.350	-33.545	
		3840.00	9.7373	37.805	-70.561	-32.756	
		3949.98	8.0344	37.805	-70.994	-33.189	
	70	3735.00	9.9487	37.805	-70.351	-32.546	
		3840.00	4.5893	37.190	-70.769	-33.579	
		3945.00	9.1974	37.805	-70.899	-33.094	
	80	3740.01	8.2896	37.805	-70.924	-33.119	
		3840.00	9.7159	37.805	-71.430	-33.625	
		3939.99	8.2707	37.805	-71.255	-33.450	
	90	3745.02	9.9726	37.805	-71.052	-33.247	
		3840.00	9.9696	37.805	-71.045	-33.240	
		3934.98	9.1271	37.805	-70.286	-32.481	
	100	3750.00	8.2722	37.805	-70.486	-32.681	
		3840.00	9.9377	37.805	-70.839	-33.034	
		3930.00	8.8295	37.805	-70.625	-32.820	

Note:

1. Plots of the EUT's Conducted Spurious Emissions are shown Page 544 ~ 597.
2. Duty Cycle factor already applied on the factor.
   - Duty Cycle Factor(dB) = 6.990

   - Factor(dB) = Duty Cycle factor + Cable Loss + Ext. Attenuator + Power Splitter
   - Result(dBm) = Reading + Factor

3. Factor(dB)

Frequency Range (GHz)	Factor [dB]
0.03 – 1	34.484
1 – 5	37.190
5 – 10	37.805
10 – 15	38.330
15 – 20	38.703
Above 20	39.345

9.7 BAND EDGE

1. Plots of the EUT's Band Edge are shown Page 436 ~ 543.
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

9.8 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE

▣ BandWidth: 20 MHz

▣ Voltage(100 %): 13.500 VDC

▣ LIMIT: Emission must remain in band

Test. Frequncy	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3710.010	100 %	+20(Ref)	3710 009 980	0.0	0.000 000	0.000
	100 %	-30	3710 009 957	-23.4	-0.000 001	-0.006
	100 %	-20	3710 009 956	-24.2	-0.000 001	-0.007
	100 %	-10	3710 009 956	-24.5	-0.000 001	-0.007
	100 %	0	3710 009 954	-25.8	-0.000 001	-0.007
	100 %	+10	3710 009 951	-29.1	-0.000 001	-0.008
	100 %	+30	3710 009 951	-29.0	-0.000 001	-0.008
	100 %	+40	3710 009 949	-31.2	-0.000 001	-0.008
	100 %	+50	3710 009 964	-16.2	0.000 000	-0.004
	85 %	+20	3710 009 965	-14.9	0.000 000	-0.004
	115 %	+20	3710 009 965	-15.3	0.000 000	-0.004
3969.990	100 %	+20(Ref)	3969 989 971	0.0	0.000 000	0.000
	100 %	-30	3969 989 959	-12.0	0.000 000	-0.003
	100 %	-20	3969 989 955	-16.3	0.000 000	-0.004
	100 %	-10	3969 989 935	-36.3	-0.000 001	-0.009
	100 %	0	3969 989 953	-18.0	0.000 000	-0.005
	100 %	+10	3969 989 950	-21.2	-0.000 001	-0.005
	100 %	+30	3969 989 950	-20.4	-0.000 001	-0.005
	100 %	+40	3969 989 949	-22.2	-0.000 001	-0.006
	100 %	+50	3969 989 948	-22.7	-0.000 001	-0.006
	85 %	+20	3969 989 951	-19.8	0.000 000	-0.005
	115 %	+20	3969 989 954	-16.8	0.000 000	-0.004

▣ BandWidth: 30 MHz

▣ Voltage(100 %): 13.500 VDC

▣ LIMIT: Emission must remain in band

Test. Frequncy	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3715.020	100 %	+20(Ref)	3715 019 988	0.0	0.000 000	0.000
	100 %	-30	3715 019 953	-34.7	-0.000 001	-0.009
	100 %	-20	3715 019 951	-36.8	-0.000 001	-0.010
	100 %	-10	3715 019 951	-37.0	-0.000 001	-0.010
	100 %	0	3715 019 967	-20.8	-0.000 001	-0.006
	100 %	+10	3715 019 963	-24.5	-0.000 001	-0.007
	100 %	+30	3715 019 965	-22.9	-0.000 001	-0.006
	100 %	+40	3715 019 957	-31.0	-0.000 001	-0.008
	100 %	+50	3715 019 957	-31.0	-0.000 001	-0.008
	85 %	+20	3715 019 963	-24.6	-0.000 001	-0.007
	115 %	+20	3715 019 961	-27.3	-0.000 001	-0.007
3964.980	100 %	+20(Ref)	3964 979 982	0.0	0.000 000	0.000
	100 %	-30	3964 979 965	-17.3	0.000 000	-0.004
	100 %	-20	3964 979 962	-20.0	-0.000 001	-0.005
	100 %	-10	3964 979 964	-18.3	0.000 000	-0.005
	100 %	0	3964 979 960	-21.6	-0.000 001	-0.005
	100 %	+10	3964 979 959	-22.5	-0.000 001	-0.006
	100 %	+30	3964 979 958	-24.0	-0.000 001	-0.006
	100 %	+40	3964 979 956	-25.9	-0.000 001	-0.007
	100 %	+50	3964 979 956	-25.9	-0.000 001	-0.007
	85 %	+20	3964 979 957	-24.4	-0.000 001	-0.006
	115 %	+20	3964 979 956	-26.1	-0.000 001	-0.007

▣ BandWidth: 40 MHz

▣ Voltage(100 %): 13.500 VDC

▣ LIMIT: Emission must remain in band

Test. Frequncy	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3720.000	100 %	+20(Ref)	3719 999 966	0.0	0.000 000	0.000
	100 %	-30	3719 999 925	-41.3	-0.000 001	-0.011
	100 %	-20	3719 999 927	-39.4	-0.000 001	-0.011
	100 %	-10	3719 999 941	-24.9	-0.000 001	-0.007
	100 %	0	3719 999 942	-24.3	-0.000 001	-0.007
	100 %	+10	3719 999 937	-28.8	-0.000 001	-0.008
	100 %	+30	3719 999 934	-31.9	-0.000 001	-0.009
	100 %	+40	3719 999 931	-35.2	-0.000 001	-0.009
	100 %	+50	3719 999 929	-37.2	-0.000 001	-0.010
	85 %	+20	3719 999 933	-33.3	-0.000 001	-0.009
	115 %	+20	3719 999 931	-35.7	-0.000 001	-0.010
3960.000	100 %	+20(Ref)	3959 999 971	0.0	0.000 000	0.000
	100 %	-30	3959 999 938	-33.1	-0.000 001	-0.008
	100 %	-20	3959 999 940	-31.7	-0.000 001	-0.008
	100 %	-10	3959 999 937	-34.1	-0.000 001	-0.009
	100 %	0	3959 999 936	-35.5	-0.000 001	-0.009
	100 %	+10	3959 999 935	-36.0	-0.000 001	-0.009
	100 %	+30	3959 999 935	-36.4	-0.000 001	-0.009
	100 %	+40	3959 999 932	-38.8	-0.000 001	-0.010
	100 %	+50	3959 999 932	-39.0	-0.000 001	-0.010
	85 %	+20	3959 999 936	-35.6	-0.000 001	-0.009
	115 %	+20	3959 999 933	-38.1	-0.000 001	-0.010

▣ BandWidth: 50 MHz

▣ Voltage(100 %): 13.500 VDC

▣ LIMIT: Emission must remain in band

Test. Frequncy	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3725.010	100 %	+20(Ref)	3725 009 983	0.0	0.000 000	0.000
	100 %	-30	3725 009 965	-17.8	0.000 000	-0.005
	100 %	-20	3725 009 958	-24.7	-0.000 001	-0.007
	100 %	-10	3725 009 956	-27.6	-0.000 001	-0.007
	100 %	0	3725 009 974	-8.9	0.000 000	-0.002
	100 %	+10	3725 009 971	-12.5	0.000 000	-0.003
	100 %	+30	3725 009 969	-14.4	0.000 000	-0.004
	100 %	+40	3725 009 963	-19.9	-0.000 001	-0.005
	100 %	+50	3725 009 960	-23.4	-0.000 001	-0.006
	85 %	+20	3725 009 958	-25.1	-0.000 001	-0.007
	115 %	+20	3725 009 962	-20.6	-0.000 001	-0.006
3954.990	100 %	+20(Ref)	3954 989 963	0.0	0.000 000	0.000
	100 %	-30	3954 989 922	-40.8	-0.000 001	-0.010
	100 %	-20	3954 989 924	-39.6	-0.000 001	-0.010
	100 %	-10	3954 989 923	-40.4	-0.000 001	-0.010
	100 %	0	3954 989 941	-21.9	-0.000 001	-0.006
	100 %	+10	3954 989 939	-24.1	-0.000 001	-0.006
	100 %	+30	3954 989 915	-48.6	-0.000 001	-0.012
	100 %	+40	3954 989 933	-30.5	-0.000 001	-0.008
	100 %	+50	3954 989 932	-31.0	-0.000 001	-0.008
	85 %	+20	3954 989 935	-28.4	-0.000 001	-0.007
	115 %	+20	3954 989 933	-29.7	-0.000 001	-0.008

▣ BandWidth: 60 MHz

▣ Voltage(100 %): 13.500 VDC

▣ LIMIT: Emission must remain in band

Test. Frequncy	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3730.020	100 %	+20(Ref)	3730 019 962	0.0	0.000 000	0.000
	100 %	-30	3730 019 918	-44.0	-0.000 001	-0.012
	100 %	-20	3730 019 915	-46.4	-0.000 001	-0.012
	100 %	-10	3730 019 915	-46.4	-0.000 001	-0.012
	100 %	0	3730 019 910	-51.4	-0.000 001	-0.014
	100 %	+10	3730 019 930	-31.6	-0.000 001	-0.008
	100 %	+30	3730 019 930	-31.6	-0.000 001	-0.008
	100 %	+40	3730 019 924	-37.8	-0.000 001	-0.010
	100 %	+50	3730 019 921	-40.3	-0.000 001	-0.011
	85 %	+20	3730 019 926	-35.4	-0.000 001	-0.009
	115 %	+20	3730 019 928	-33.9	-0.000 001	-0.009
3949.980	100 %	+20(Ref)	3949 979 956	0.0	0.000 000	0.000
	100 %	-30	3949 979 930	-26.1	-0.000 001	-0.007
	100 %	-20	3949 979 929	-27.1	-0.000 001	-0.007
	100 %	-10	3949 979 929	-27.1	-0.000 001	-0.007
	100 %	0	3949 979 926	-29.8	-0.000 001	-0.008
	100 %	+10	3949 979 926	-30.0	-0.000 001	-0.008
	100 %	+30	3949 979 926	-30.0	-0.000 001	-0.008
	100 %	+40	3949 979 923	-32.4	-0.000 001	-0.008
	100 %	+50	3949 979 940	-15.2	0.000 000	-0.004
	85 %	+20	3949 979 942	-13.8	0.000 000	-0.003
	115 %	+20	3949 979 934	-21.6	-0.000 001	-0.005

▣ BandWidth: 70 MHz

▣ Voltage(100 %): 13.500 VDC

▣ LIMIT: Emission must remain in band

Test. Frequncy	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3735.000	100 %	+20(Ref)	3734 999 988	0.0	0.000 000	0.000
	100 %	-30	3734 999 944	-43.7	-0.000 001	-0.012
	100 %	-20	3734 999 944	-43.7	-0.000 001	-0.012
	100 %	-10	3734 999 960	-27.8	-0.000 001	-0.007
	100 %	0	3734 999 976	-11.6	0.000 000	-0.003
	100 %	+10	3734 999 976	-11.6	0.000 000	-0.003
	100 %	+30	3734 999 947	-40.5	-0.000 001	-0.011
	100 %	+40	3734 999 962	-25.1	-0.000 001	-0.007
	100 %	+50	3734 999 962	-25.1	-0.000 001	-0.007
	85 %	+20	3734 999 963	-24.4	-0.000 001	-0.007
	115 %	+20	3734 999 956	-31.8	-0.000 001	-0.009
3945.000	100 %	+20(Ref)	3944 999 969	0.0	0.000 000	0.000
	100 %	-30	3944 999 938	-31.5	-0.000 001	-0.008
	100 %	-20	3944 999 938	-31.5	-0.000 001	-0.008
	100 %	-10	3944 999 937	-32.9	-0.000 001	-0.008
	100 %	0	3944 999 934	-35.0	-0.000 001	-0.009
	100 %	+10	3944 999 931	-37.9	-0.000 001	-0.010
	100 %	+30	3944 999 931	-37.9	-0.000 001	-0.010
	100 %	+40	3944 999 950	-19.6	0.000 000	-0.005
	100 %	+50	3944 999 951	-18.7	0.000 000	-0.005
	85 %	+20	3944 999 954	-15.6	0.000 000	-0.004
	115 %	+20	3944 999 946	-23.8	-0.000 001	-0.006

▣ BandWidth: 80 MHz

▣ Voltage(100 %): 13.500 VDC

▣ LIMIT: Emission must remain in band

Test. Frequncy	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3740.010	100 %	+20(Ref)	3740 009 959	0.0	0.000 000	0.000
	100 %	-30	3740 009 937	-22.2	-0.000 001	-0.006
	100 %	-20	3740 009 915	-44.6	-0.000 001	-0.012
	100 %	-10	3740 009 915	-44.6	-0.000 001	-0.012
	100 %	0	3740 009 937	-22.0	-0.000 001	-0.006
	100 %	+10	3740 009 933	-26.2	-0.000 001	-0.007
	100 %	+30	3740 009 933	-26.2	-0.000 001	-0.007
	100 %	+40	3740 009 929	-29.9	-0.000 001	-0.008
	100 %	+50	3740 009 928	-31.7	-0.000 001	-0.008
	85 %	+20	3740 009 932	-26.7	-0.000 001	-0.007
	115 %	+20	3740 009 934	-25.5	-0.000 001	-0.007
3939.990	100 %	+20(Ref)	3939 989 972	0.0	0.000 000	0.000
	100 %	-30	3939 989 968	-3.7	0.000 000	-0.001
	100 %	-20	3939 989 968	-3.7	0.000 000	-0.001
	100 %	-10	3939 989 944	-28.1	-0.000 001	-0.007
	100 %	0	3939 989 944	-27.6	-0.000 001	-0.007
	100 %	+10	3939 989 944	-27.6	-0.000 001	-0.007
	100 %	+30	3939 989 944	-27.6	-0.000 001	-0.007
	100 %	+40	3939 989 944	-27.4	-0.000 001	-0.007
	100 %	+50	3939 989 944	-27.4	-0.000 001	-0.007
	85 %	+20	3939 989 945	-26.7	-0.000 001	-0.007
	115 %	+20	3939 989 941	-31.1	-0.000 001	-0.008

▣ BandWidth: 90 MHz

▣ Voltage(100 %): 13.500 VDC

▣ LIMIT: Emission must remain in band

Test. Frequncy	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3745.020	100 %	+20(Ref)	3745 019 955	0.0	0.000 000	0.000
	100 %	-30	3745 019 910	-44.8	-0.000 001	-0.012
	100 %	-20	3745 019 929	-26.0	-0.000 001	-0.007
	100 %	-10	3745 019 921	-34.5	-0.000 001	-0.009
	100 %	0	3745 019 921	-34.5	-0.000 001	-0.009
	100 %	+10	3745 019 913	-42.5	-0.000 001	-0.011
	100 %	+30	3745 019 927	-28.6	-0.000 001	-0.008
	100 %	+40	3745 019 927	-28.6	-0.000 001	-0.008
	100 %	+50	3745 019 919	-36.1	-0.000 001	-0.010
	85 %	+20	3745 019 923	-31.9	-0.000 001	-0.009
	115 %	+20	3745 019 925	-30.3	-0.000 001	-0.008
3934.980	100 %	+20(Ref)	3934 979 966	0.0	0.000 000	0.000
	100 %	-30	3934 979 952	-14.4	0.000 000	-0.004
	100 %	-20	3934 979 952	-14.4	0.000 000	-0.004
	100 %	-10	3934 979 941	-24.5	-0.000 001	-0.006
	100 %	0	3934 979 937	-28.6	-0.000 001	-0.007
	100 %	+10	3934 979 937	-28.6	-0.000 001	-0.007
	100 %	+30	3934 979 930	-36.1	-0.000 001	-0.009
	100 %	+40	3934 979 950	-15.4	0.000 000	-0.004
	100 %	+50	3934 979 950	-15.4	0.000 000	-0.004
	85 %	+20	3934 979 952	-13.7	0.000 000	-0.003
	115 %	+20	3934 979 947	-19.2	0.000 000	-0.005

▣ BandWidth: 100 MHz

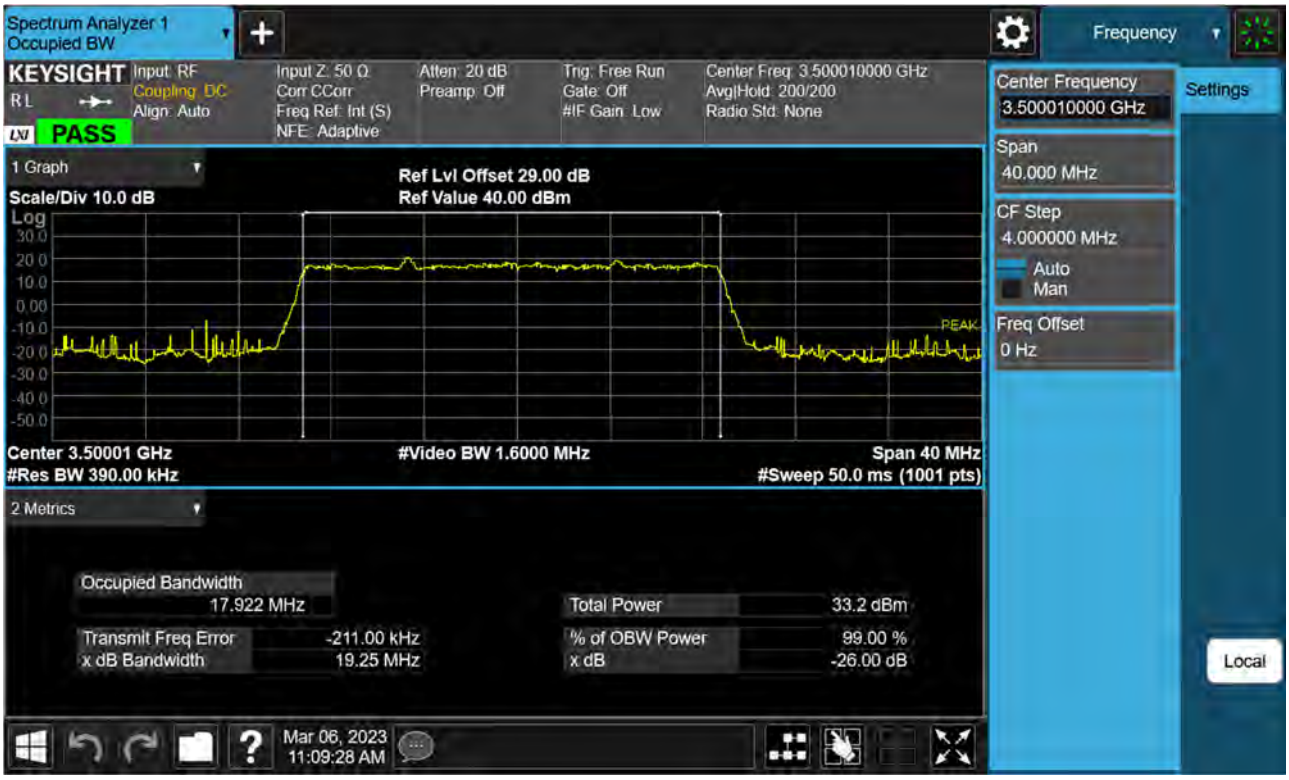
▣ Voltage(100 %): 13.500 VDC

▣ LIMIT: Emission must remain in band

Test. Frequncy	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3750.000	100 %	+20(Ref)	3749 999 977	0.0	0.000 000	0.000
	100 %	-30	3749 999 946	-30.9	-0.000 001	-0.008
	100 %	-20	3749 999 946	-30.9	-0.000 001	-0.008
	100 %	-10	3749 999 957	-20.2	-0.000 001	-0.005
	100 %	0	3749 999 952	-24.6	-0.000 001	-0.007
	100 %	+10	3749 999 936	-41.3	-0.000 001	-0.011
	100 %	+30	3749 999 949	-27.6	-0.000 001	-0.007
	100 %	+40	3749 999 950	-26.5	-0.000 001	-0.007
	100 %	+50	3749 999 963	-14.4	0.000 000	-0.004
	85 %	+20	3749 999 966	-11.1	0.000 000	-0.003
	115 %	+20	3749 999 963	-13.7	0.000 000	-0.004
3930.000	100 %	+20(Ref)	3929 999 976	0.0	0.000 000	0.000
	100 %	-30	3929 999 947	-29.5	-0.000 001	-0.007
	100 %	-20	3929 999 958	-18.7	0.000 000	-0.005
	100 %	-10	3929 999 958	-18.7	0.000 000	-0.005
	100 %	0	3929 999 937	-38.9	-0.000 001	-0.010
	100 %	+10	3929 999 952	-24.2	-0.000 001	-0.006
	100 %	+30	3929 999 952	-24.2	-0.000 001	-0.006
	100 %	+40	3929 999 952	-24.2	-0.000 001	-0.006
	100 %	+50	3929 999 951	-25.6	-0.000 001	-0.007
	85 %	+20	3929 999 957	-19.5	0.000 000	-0.005
	115 %	+20	3929 999 953	-22.8	-0.000 001	-0.006

10. TEST PLOTS(3450 MHz - 3550 MHz)

Sub6 n77(78). Occupied Bandwidth Plot (20 M BW Ch.633334 BPSK)



Sub6 n77(78). Occupied Bandwidth Plot (20 M BW Ch.633334 QPSK)

Sub6 n77(78). Occupied Bandwidth Plot (20 M BW Ch.633334 16QAM)

Sub6 n77(78). Occupied Bandwidth Plot (20 M BW Ch.633334 64QAM)

Sub6 n77(78). Occupied Bandwidth Plot (30 M BW Ch.633334 BPSK)

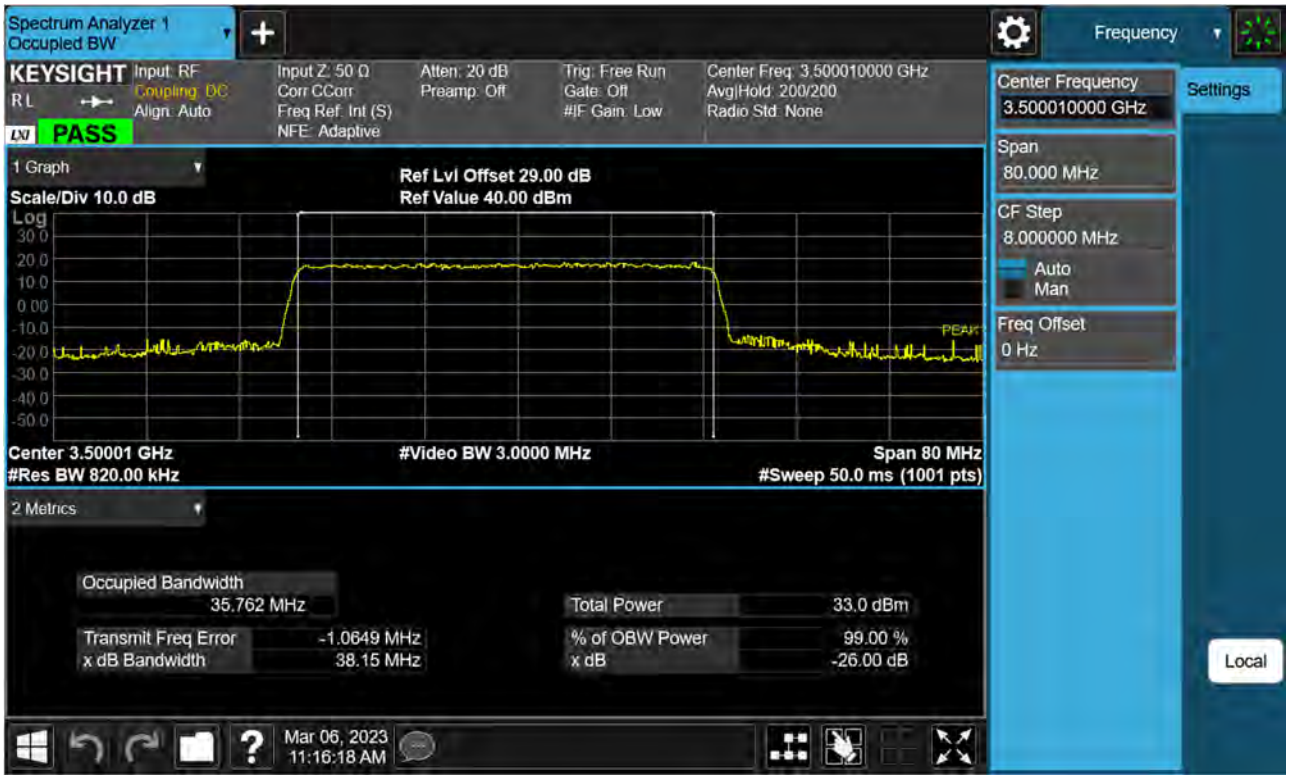
Sub6 n77(78). Occupied Bandwidth Plot (30 M BW Ch.633334 QPSK)

Sub6 n77(78). Occupied Bandwidth Plot (30 M BW Ch.633334 16QAM)

Sub6 n77(78). Occupied Bandwidth Plot (30 M BW Ch.633334 64QAM)

Sub6 n77(78). Occupied Bandwidth Plot (40 M BW Ch.633334 BPSK)

Sub6 n77(78). Occupied Bandwidth Plot (40 M BW Ch.633334 QPSK)



Sub6 n77(78). Occupied Bandwidth Plot (40 M BW Ch.633334 16QAM)

Sub6 n77(78). Occupied Bandwidth Plot (40 M BW Ch.633334 64QAM)

Sub6 n77(78). Occupied Bandwidth Plot (50 M BW Ch.633334 BPSK)

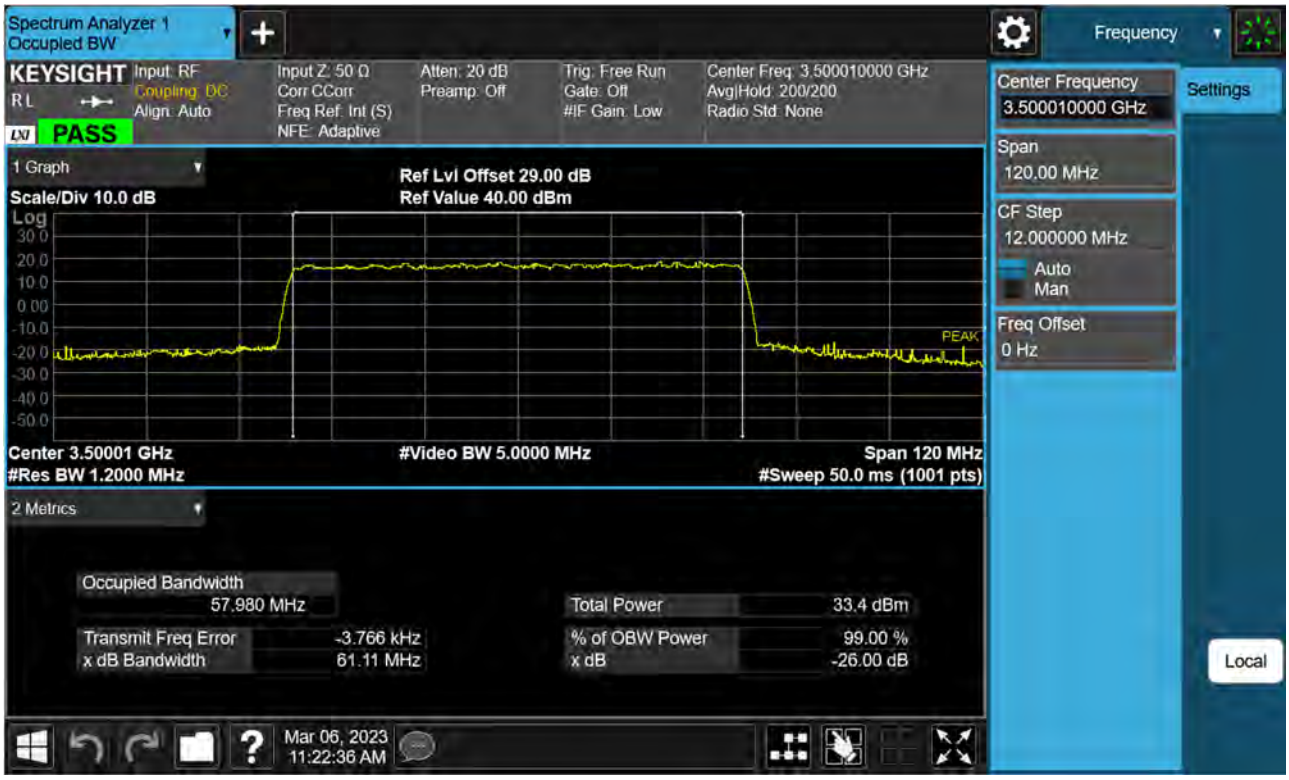
Sub6 n77(78). Occupied Bandwidth Plot (50 M BW Ch.633334 QPSK)

Sub6 n77(78). Occupied Bandwidth Plot (50 M BW Ch.633334 16QAM)

Sub6 n77(78). Occupied Bandwidth Plot (50 M BW Ch.633334 64QAM)

Sub6 n77(78). Occupied Bandwidth Plot (60 M BW Ch.633334 BPSK)

Sub6 n77(78). Occupied Bandwidth Plot (60 M BW Ch.633334 QPSK)



Sub6 n77(78). Occupied Bandwidth Plot (60 M BW Ch.633334 16QAM)

Sub6 n77(78). Occupied Bandwidth Plot (60 M BW Ch.633334 64QAM)

Sub6 n77(78). Occupied Bandwidth Plot (70 M BW Ch.633334 BPSK)

Sub6 n77(78). Occupied Bandwidth Plot (70 M BW Ch.633334 QPSK)

Sub6 n77(78). Occupied Bandwidth Plot (70 M BW Ch.633334 16QAM)

Sub6 n77(78). Occupied Bandwidth Plot (70 M BW Ch.633334 64QAM)

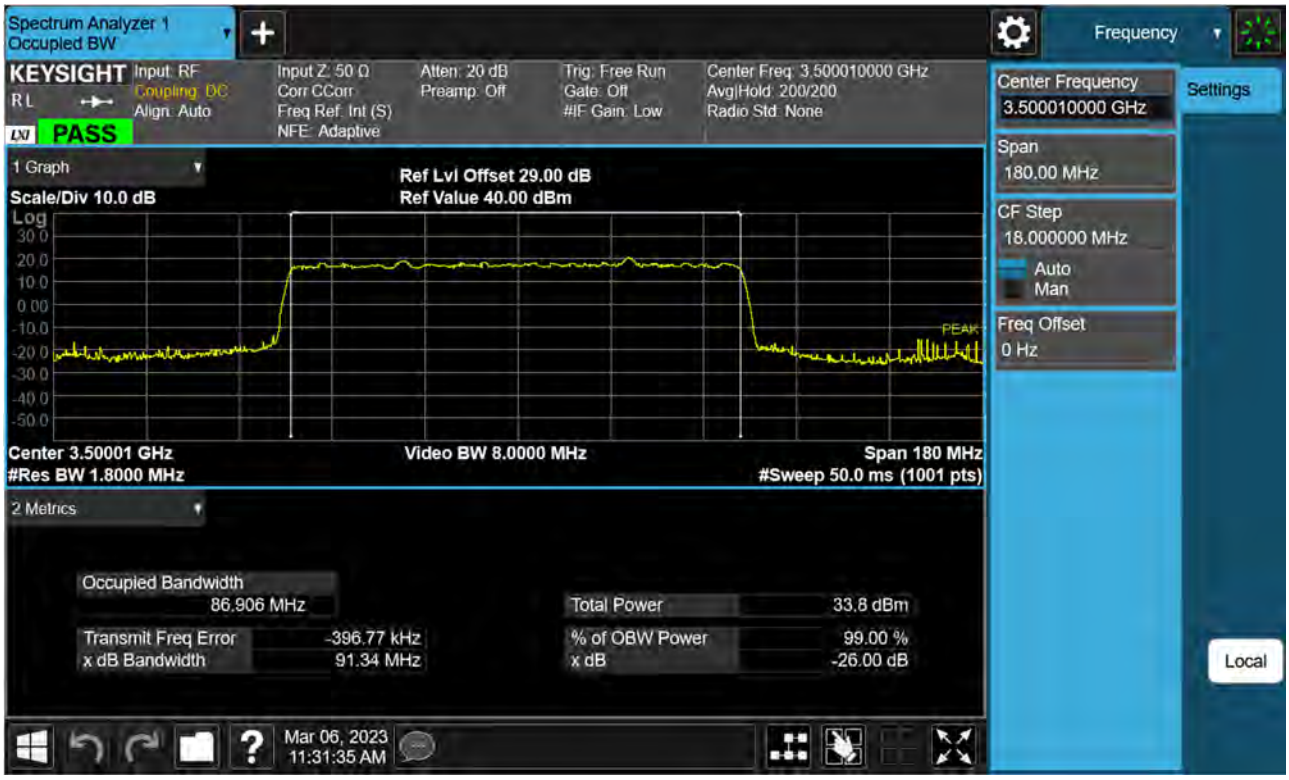
Sub6 n77(78). Occupied Bandwidth Plot (80 M BW Ch.633334 BPSK)

Sub6 n77(78). Occupied Bandwidth Plot (80 M BW Ch.633334 QPSK)

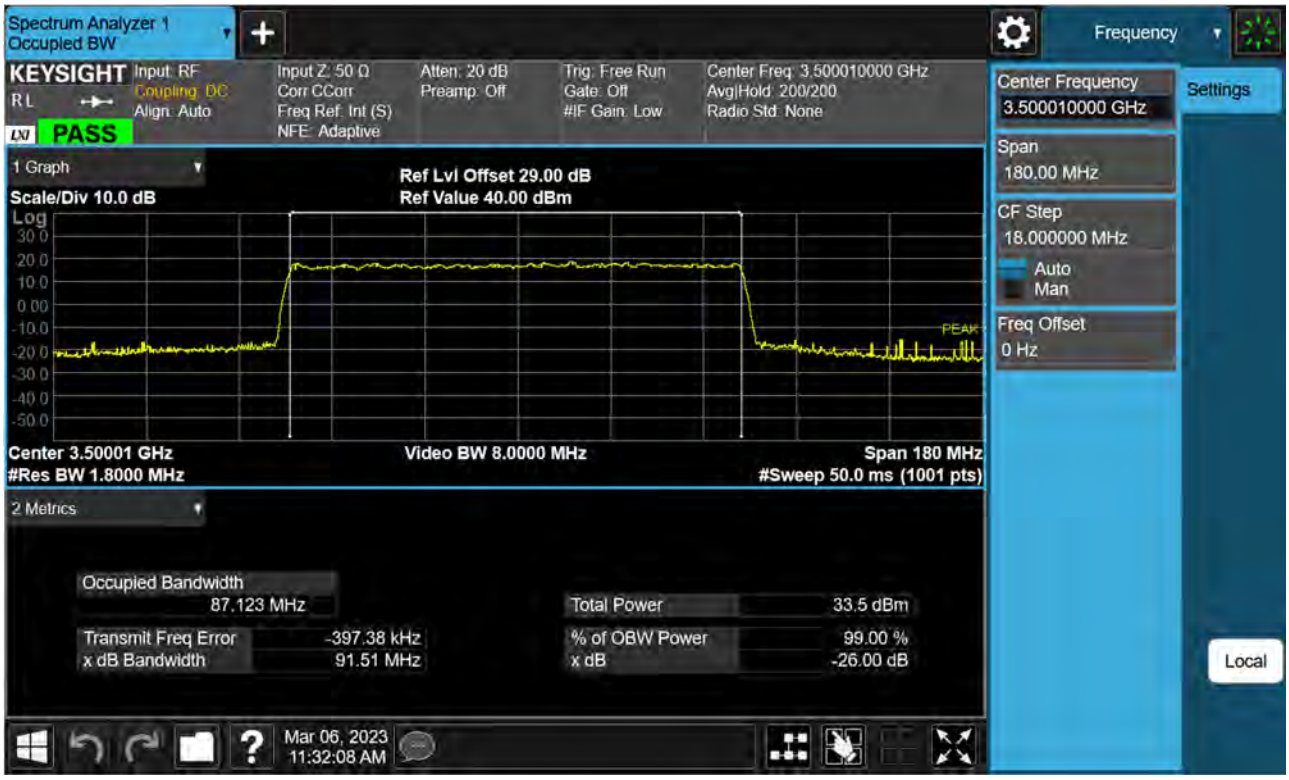
Sub6 n77(78). Occupied Bandwidth Plot (80 M BW Ch.633334 16QAM)

Sub6 n77(78). Occupied Bandwidth Plot (80 M BW Ch.633334 64QAM)

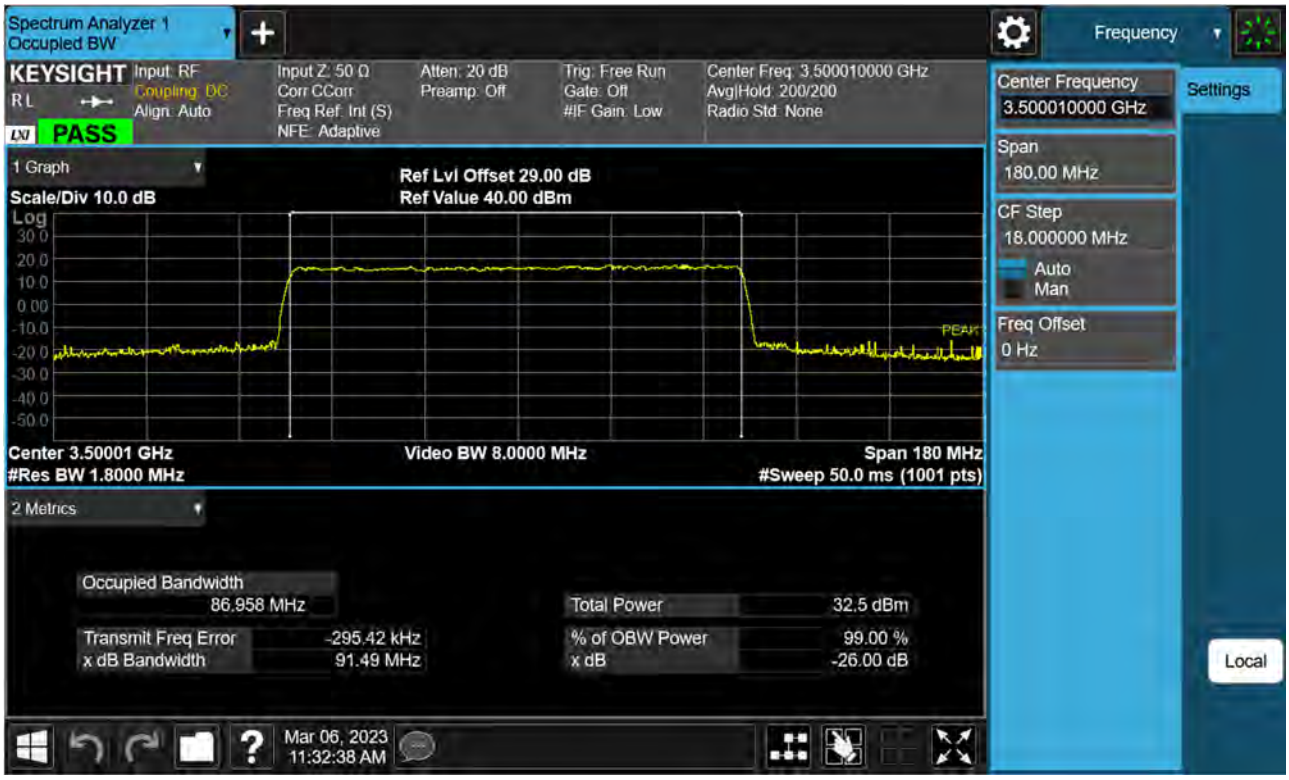
Sub6 n77(78). Occupied Bandwidth Plot (90 M BW Ch.633334 BPSK)



Sub6 n77(78). Occupied Bandwidth Plot (90 M BW Ch.633334 QPSK)



Sub6 n77(78). Occupied Bandwidth Plot (90 M BW Ch.633334 16QAM)



Sub6 n77(78). Occupied Bandwidth Plot (90 M BW Ch.633334 64QAM)

Sub6 n77(78). Occupied Bandwidth Plot (100 M BW Ch.633334 BPSK)

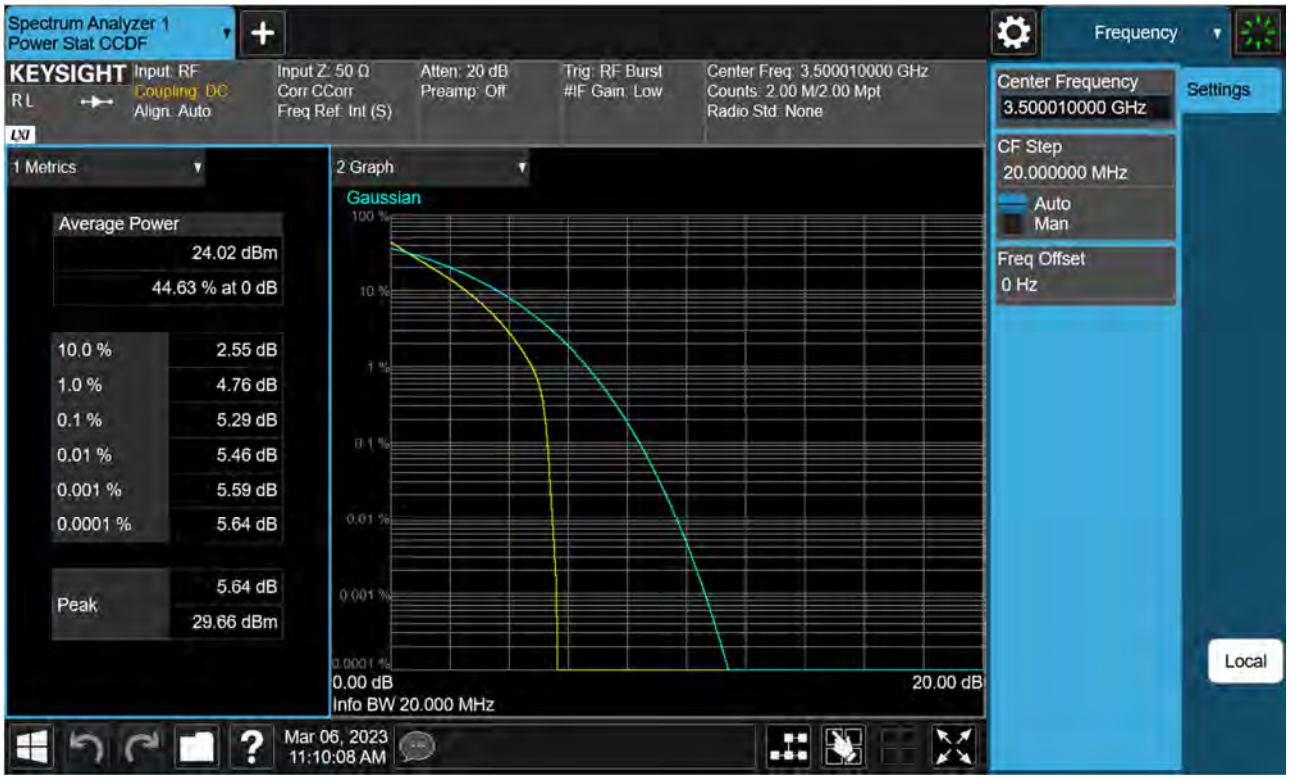
Sub6 n77(78). Occupied Bandwidth Plot (100 M BW Ch.633334 QPSK)

Sub6 n77(78). Occupied Bandwidth Plot (100 M BW Ch.633334 16QAM)

Sub6 n77(78). Occupied Bandwidth Plot (100 M BW Ch.633334 64QAM)

Sub6 n77(78). PAR Plot (20 M BW_Ch.633334_ BPSK)

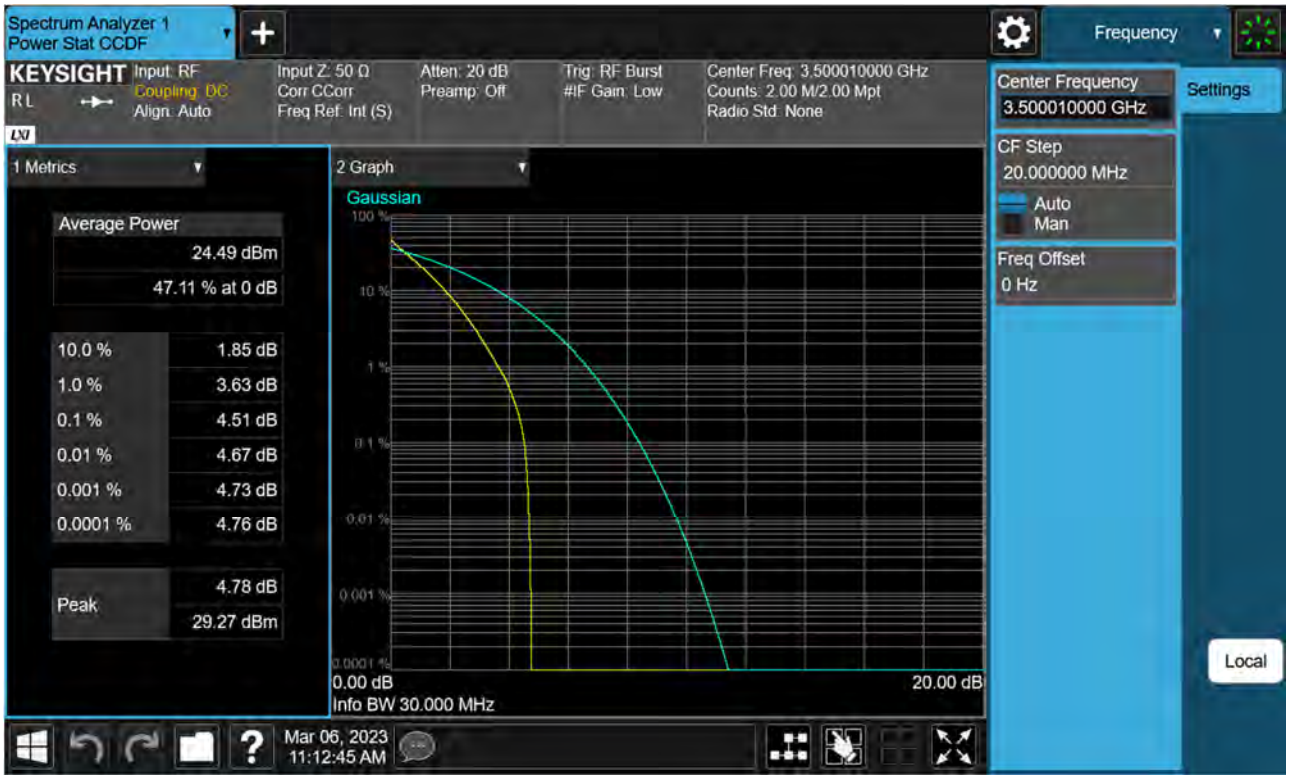
Sub6 n77(78). PAR Plot (20 M BW_Ch.633334_QPSK)



Sub6 n77(78). PAR Plot (20 M BW_Ch.633334_16QAM)

Sub6 n77(78). PAR Plot (20 M BW_Ch.633334_64QAM)

Sub6 n77(78). PAR Plot (30 M BW_Ch.633334_ BPSK)



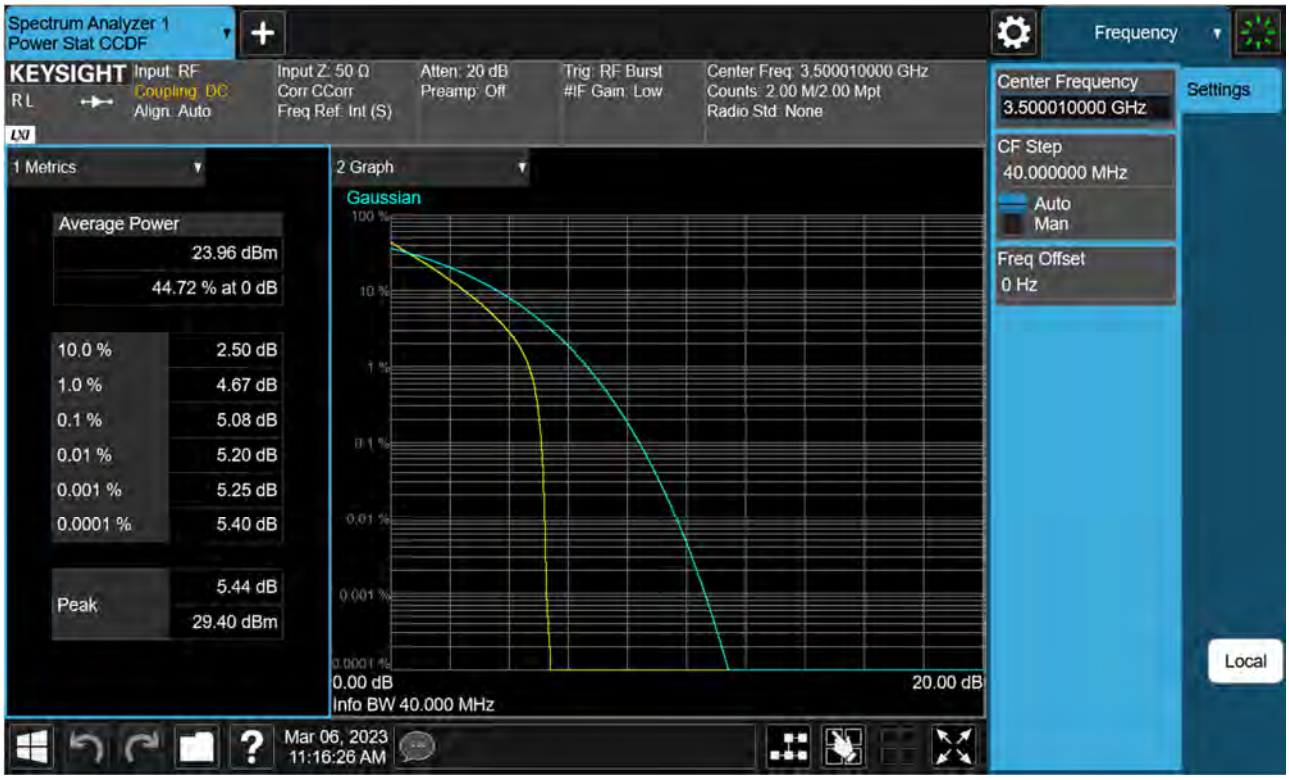
Sub6 n77(78). PAR Plot (30 M BW_Ch.633334_QPSK)

Sub6 n77(78). PAR Plot (30 M BW_Ch.633334_16QAM)

Sub6 n77(78). PAR Plot (30 M BW_Ch.633334_64QAM)

Sub6 n77(78). PAR Plot (40 M BW_Ch.633334_ BPSK)

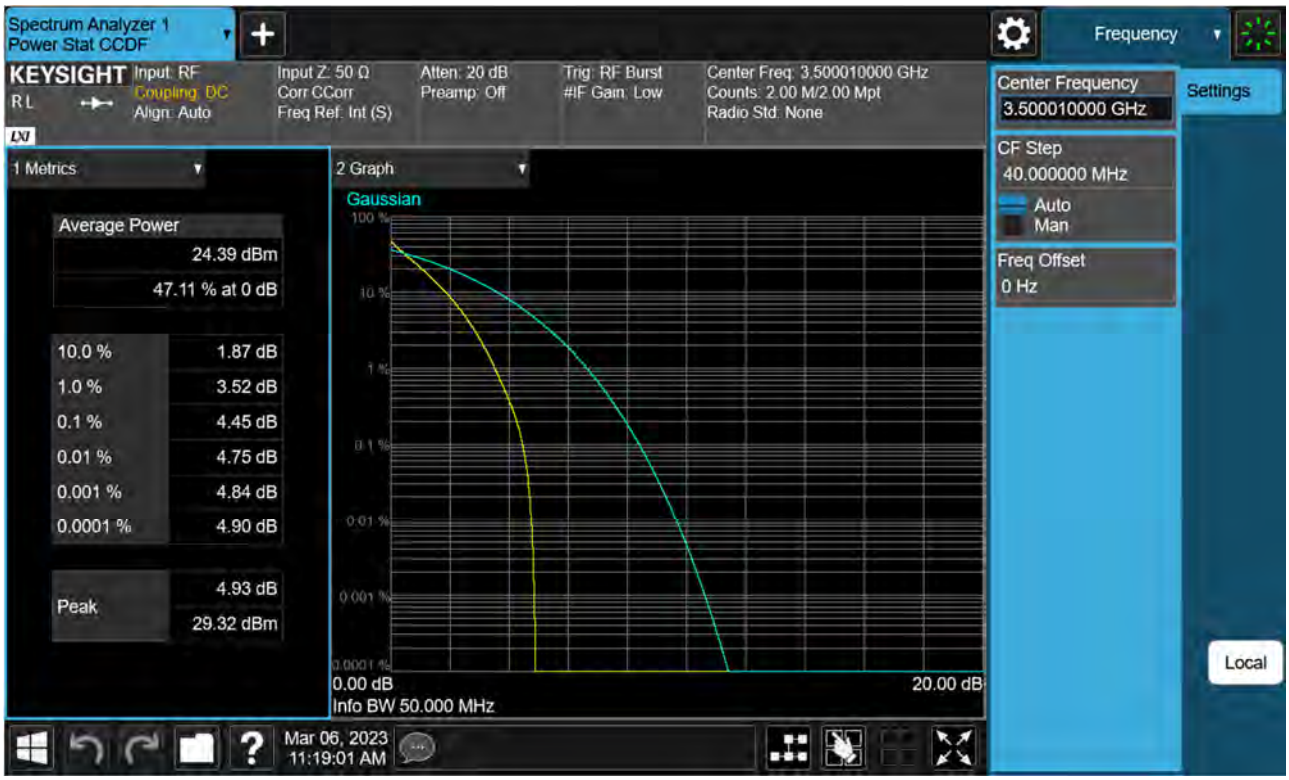
Sub6 n77(78). PAR Plot (40 M BW_Ch.633334_QPSK)



Sub6 n77(78). PAR Plot (40 M BW_Ch.633334_16QAM)

Sub6 n77(78). PAR Plot (40 M BW_Ch.633334_64QAM)

Sub6 n77(78). PAR Plot (50 M BW_Ch.633334_ BPSK)

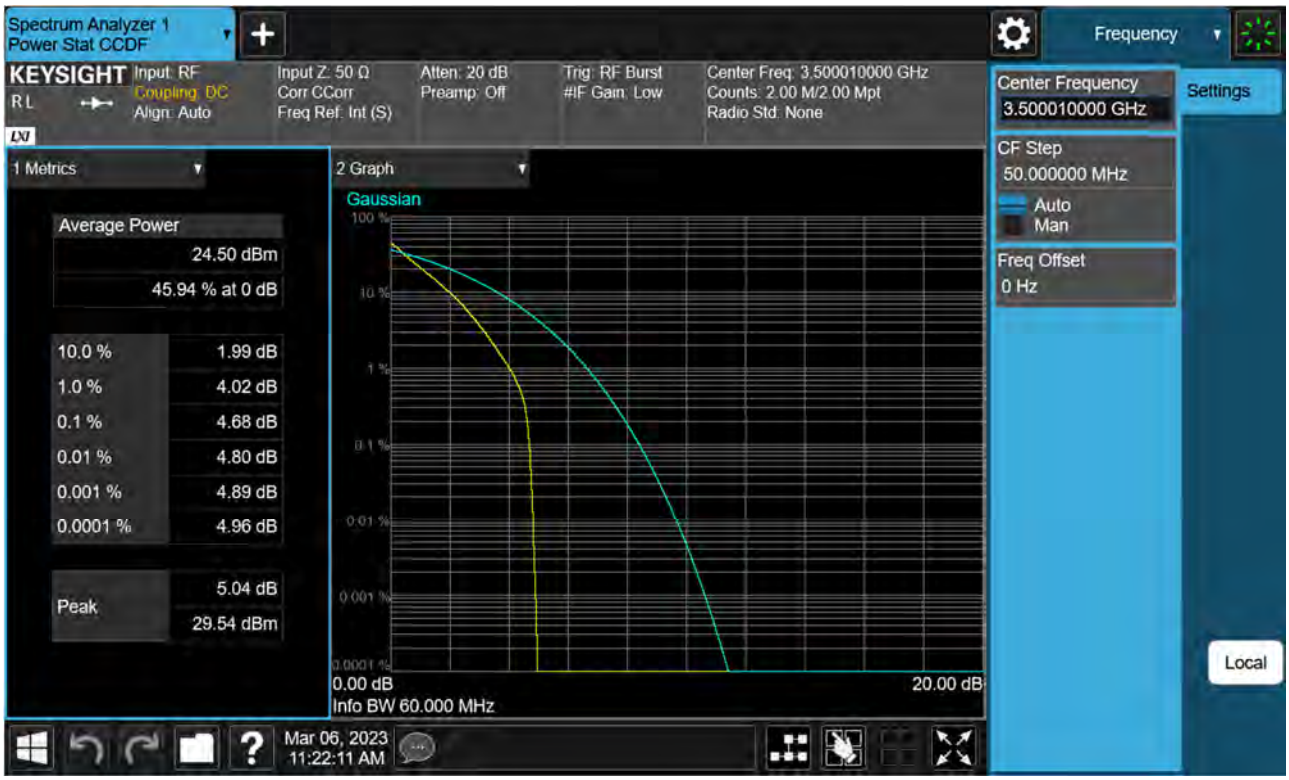


Sub6 n77(78). PAR Plot (50 M BW_Ch.633334_QPSK)

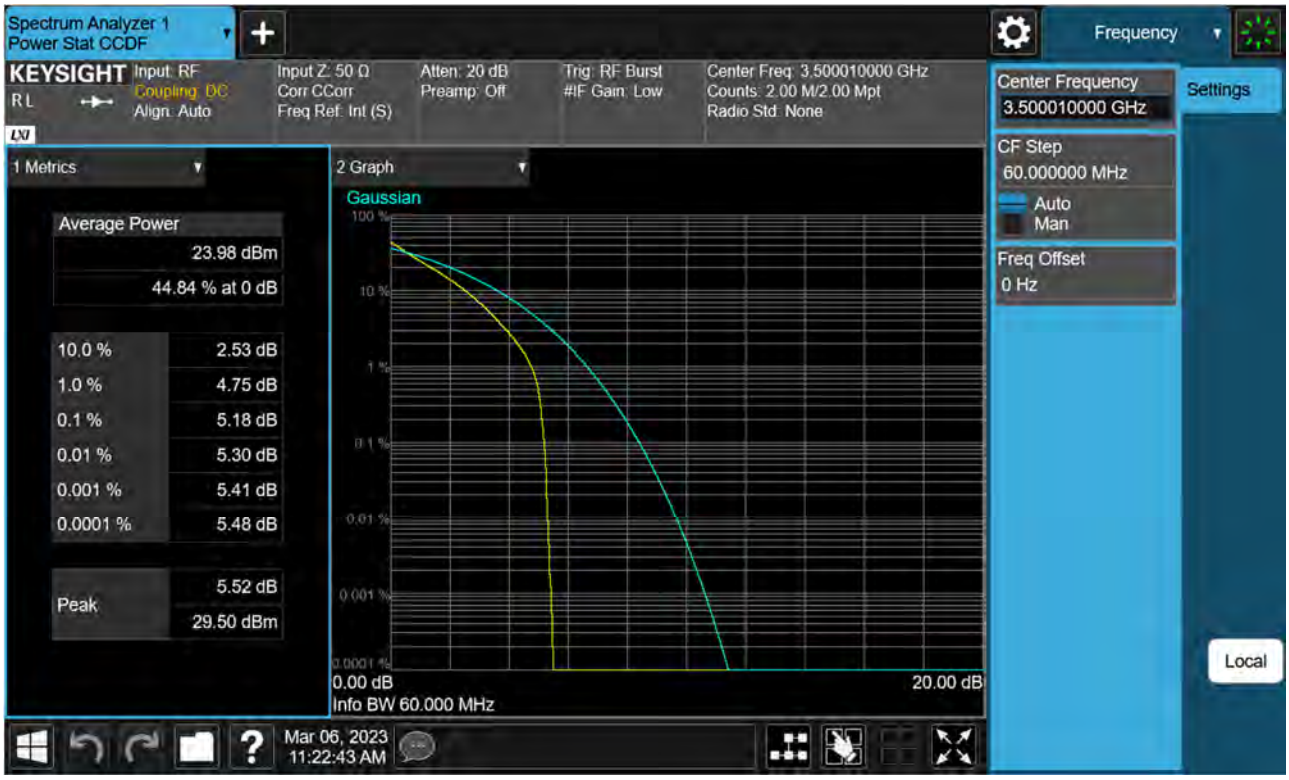
Sub6 n77(78). PAR Plot (50 M BW_Ch.633334_16QAM)

Sub6 n77(78). PAR Plot (50 M BW_Ch.633334_64QAM)

Sub6 n77(78). PAR Plot (60 M BW_Ch.633334_ BPSK)



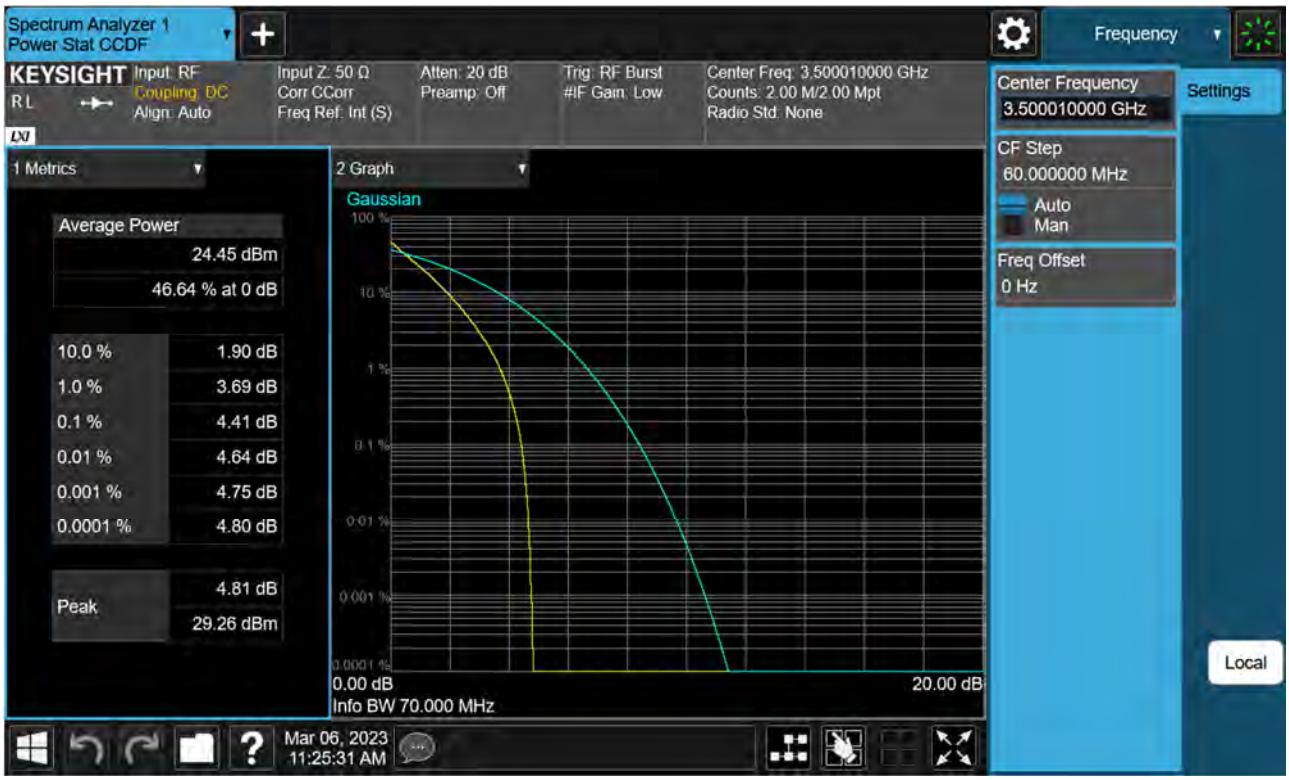
Sub6 n77(78). PAR Plot (60 M BW_Ch.633334_QPSK)



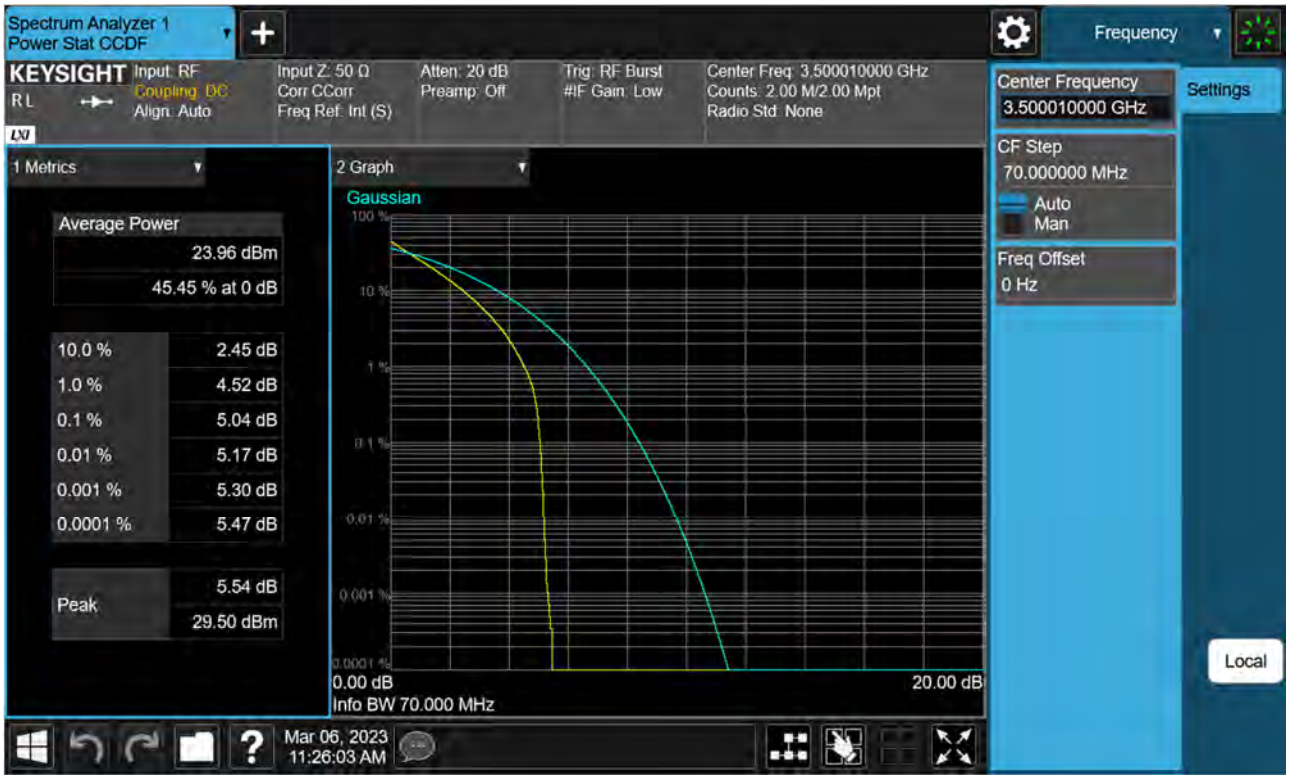
Sub6 n77(78). PAR Plot (60 M BW_Ch.633334_16QAM)

Sub6 n77(78). PAR Plot (60 M BW_Ch.633334_64QAM)

Sub6 n77(78). PAR Plot (70 M BW_Ch.633334_ BPSK)



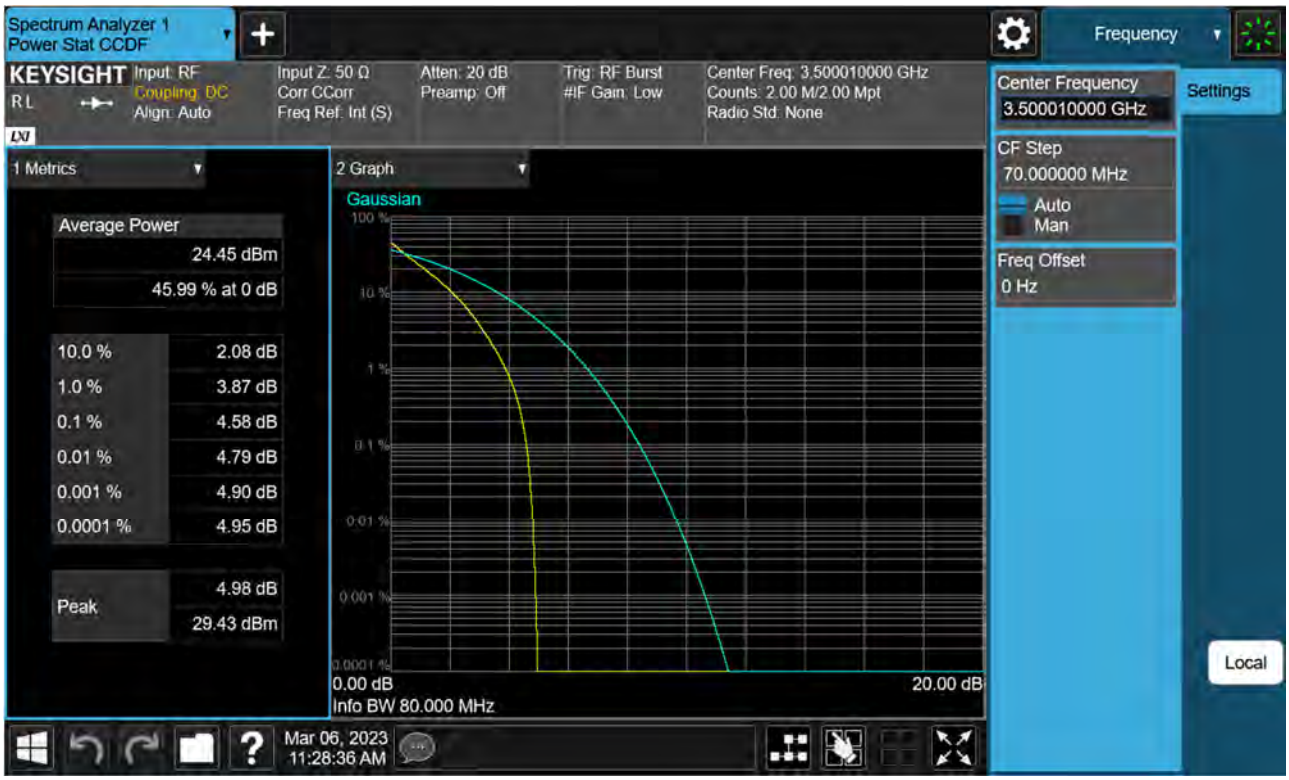
Sub6 n77(78). PAR Plot (70 M BW_Ch.633334_QPSK)



Sub6 n77(78). PAR Plot (70 M BW_Ch.633334_16QAM)

Sub6 n77(78). PAR Plot (70 M BW_Ch.633334_64QAM)

Sub6 n77(78). PAR Plot (80 M BW_Ch.633334_ BPSK)

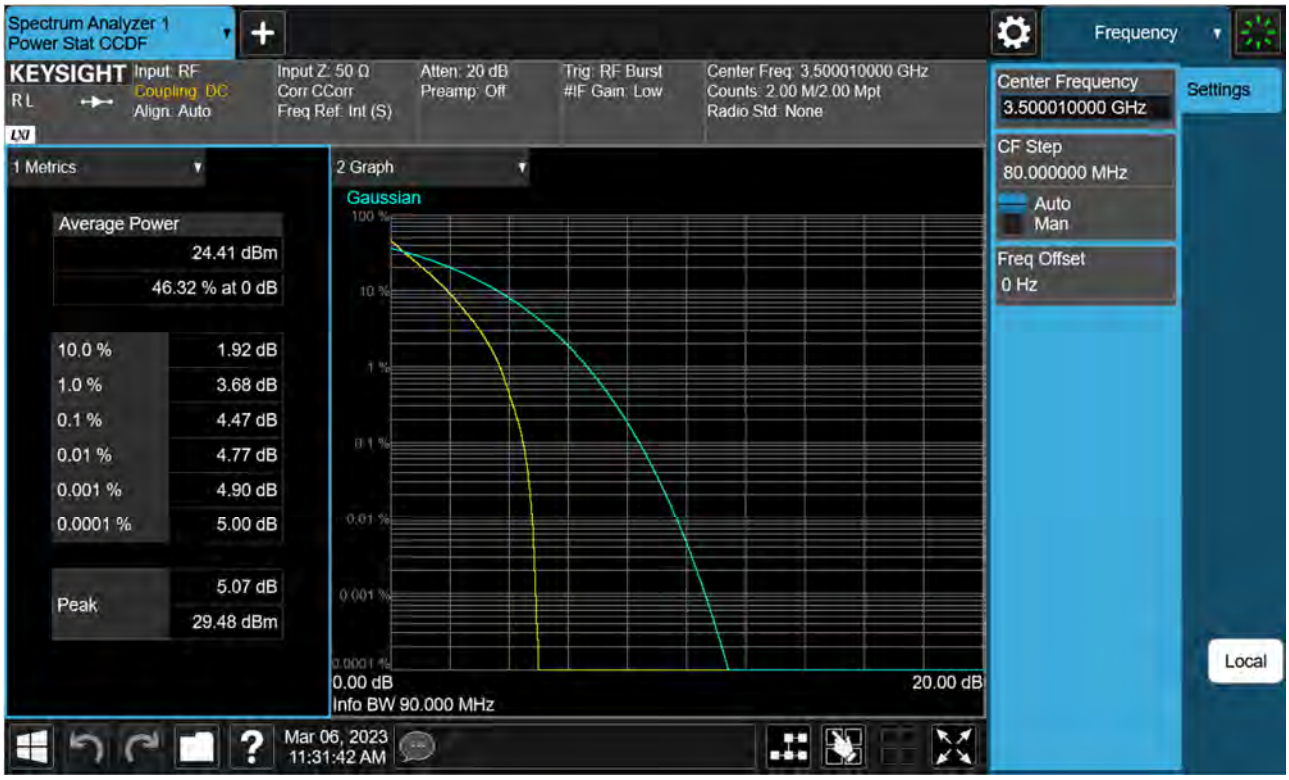


Sub6 n77(78). PAR Plot (80 M BW_Ch.633334_QPSK)

Sub6 n77(78). PAR Plot (80 M BW_Ch.633334_16QAM)

Sub6 n77(78). PAR Plot (80 M BW_Ch.633334_64QAM)

Sub6 n77(78). PAR Plot (90 M BW_Ch.633334_ BPSK)



Sub6 n77(78). PAR Plot (90 M BW_Ch.633334_QPSK)

Sub6 n77(78). PAR Plot (90 M BW_Ch.633334_16QAM)

Sub6 n77(78). PAR Plot (90 M BW_Ch.633334_64QAM)

Sub6 n77(78). PAR Plot (100 M BW_Ch.633334_ BPSK)

Sub6 n77(78). PAR Plot (100 M BW_Ch.633334_QPSK)

Sub6 n77(78). PAR Plot (100 M BW_Ch.633334_16QAM)

Sub6 n77(78). PAR Plot (100 M BW_Ch.633334_64QAM)

Sub6 n77(78). Low Band Edge Plot (20 M BW Ch.630668 BPSK 1RB)(1)

Sub6 n77(78). Low Band Edge Plot (20 M BW Ch.630668 BPSK FullRB)(1)

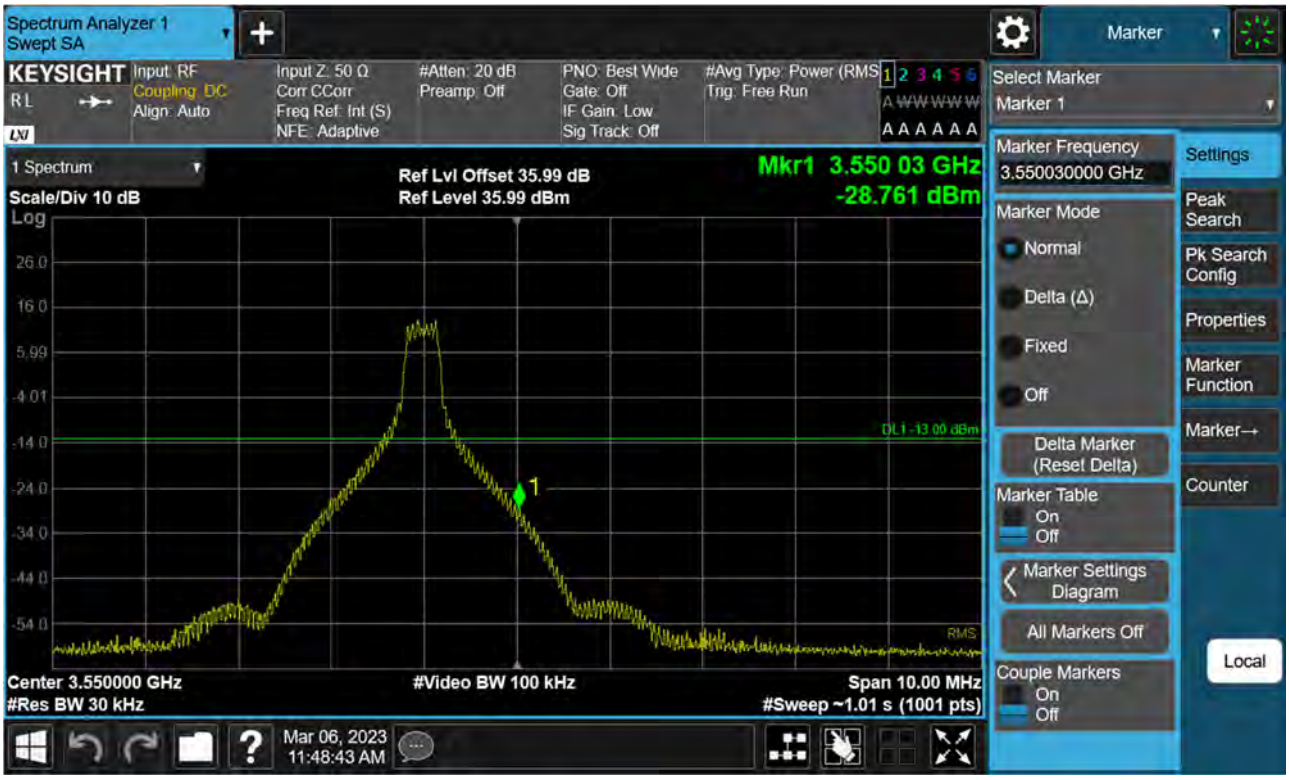
Sub6 n77(78). Low Band Edge Plot (20 M BW Ch.630668 BPSK 1RB)(2)

Sub6 n77(78). Low Band Edge Plot (20 M BW Ch.630668 BPSK FullRB)(2)

Sub6 n77(78). Low Band Edge Plot (20 M BW Ch.630668 BPSK 1RB)(3)

Sub6 n77(78). Low Band Edge Plot (20 M BW Ch.630668 BPSK FullRB)(3)

Sub6 n77(78). High Band Edge Plot (20 M BW Ch.636000 BPSK 1RB)(1)



Sub6 n77(78). High Band Edge Plot (20 M BW Ch.636000 BPSK FullRB)(1)

Sub6 n77(78). High Band Edge Plot (20 M BW Ch.636000 BPSK 1RB)(2)

Sub6 n77(78). High Band Edge Plot (20 M BW Ch.636000 BPSK FullRB)(2)

Sub6 n77(78). High Band Edge Plot (20 M BW Ch.636000 BPSK 1RB)(3)

Sub6 n77(78). High Band Edge Plot (20 M BW Ch.636000 BPSK FullRB)(3)

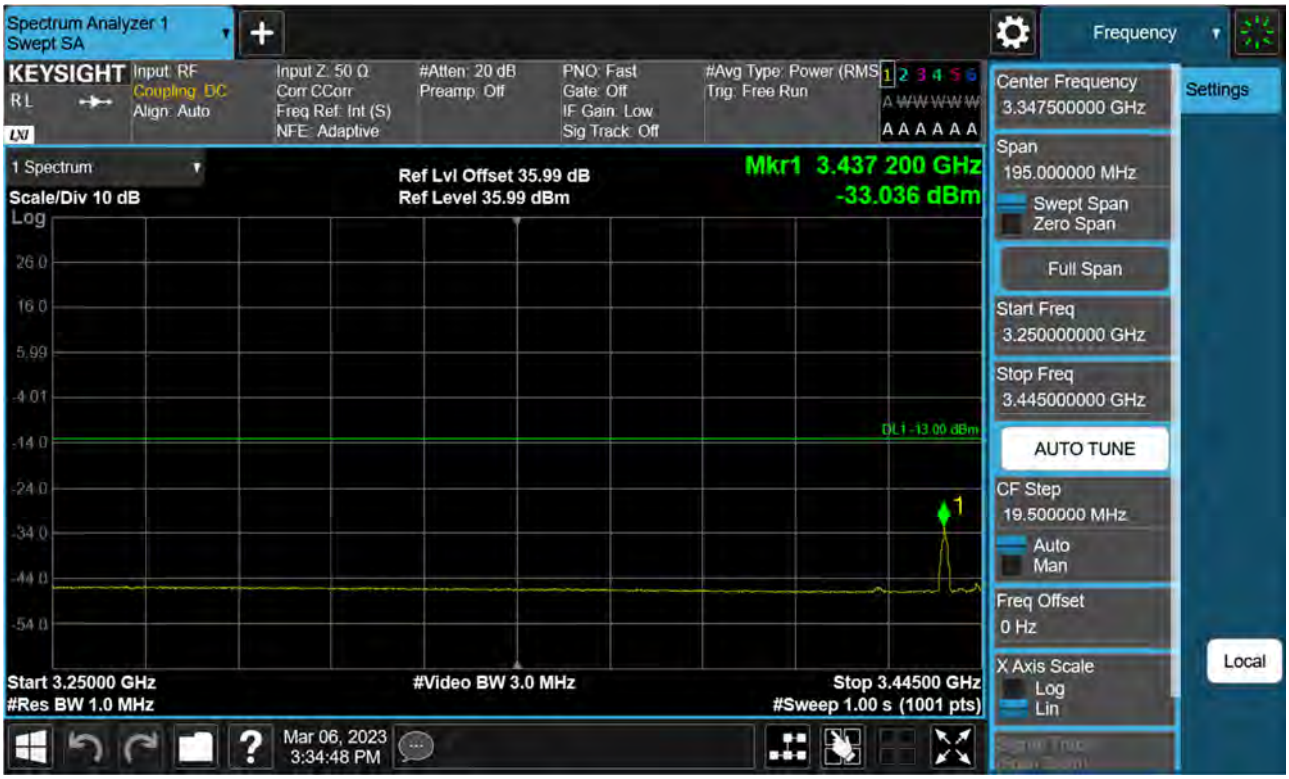
Sub6 n77(78). Low Band Edge Plot (30 M BW Ch.631000 BPSK 1RB)(1)

Sub6 n77(78). Low Band Edge Plot (30 M BW Ch.631000 BPSK FullRB)(1)

Sub6 n77(78). Low Band Edge Plot (30 M BW Ch.631000 BPSK 1RB)(2)

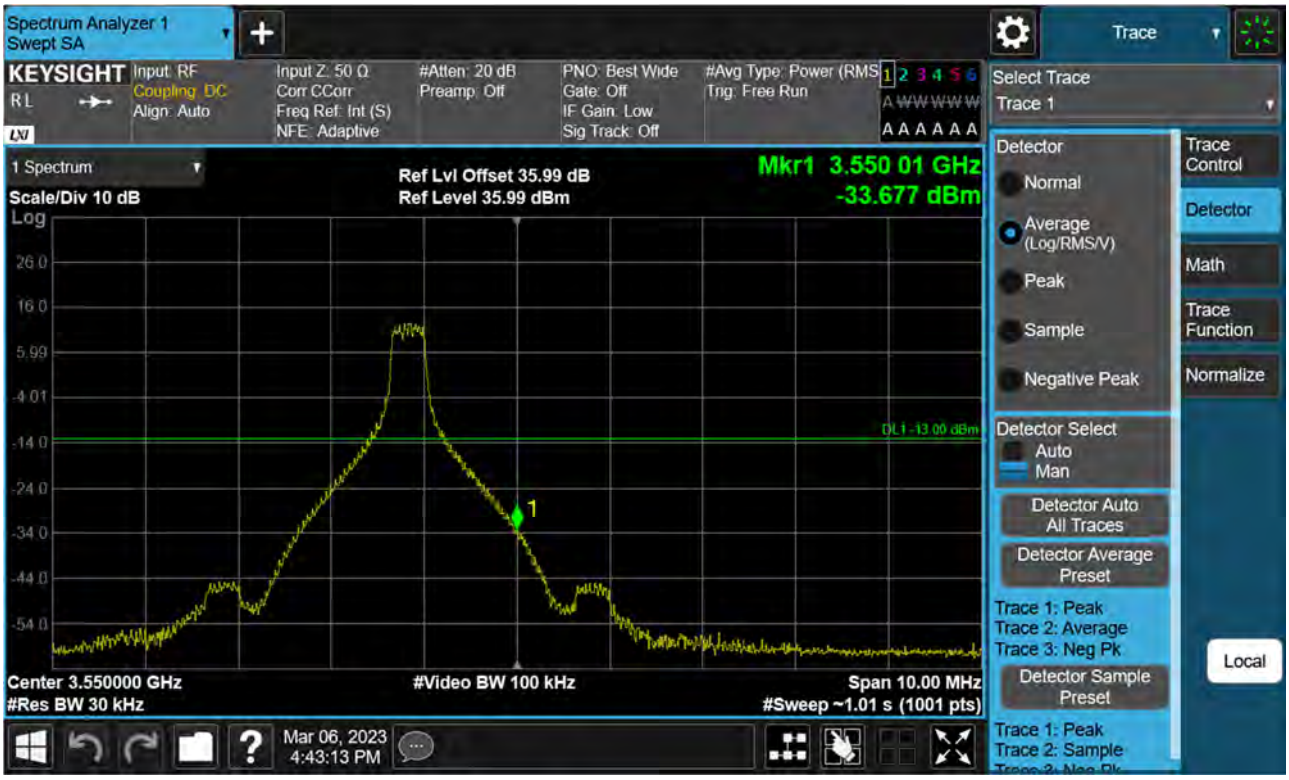
Sub6 n77(78). Low Band Edge Plot (30 M BW Ch.631000 BPSK FullRB)(2)

Sub6 n77(78). Low Band Edge Plot (30 M BW Ch.631000 BPSK 1RB)(3)



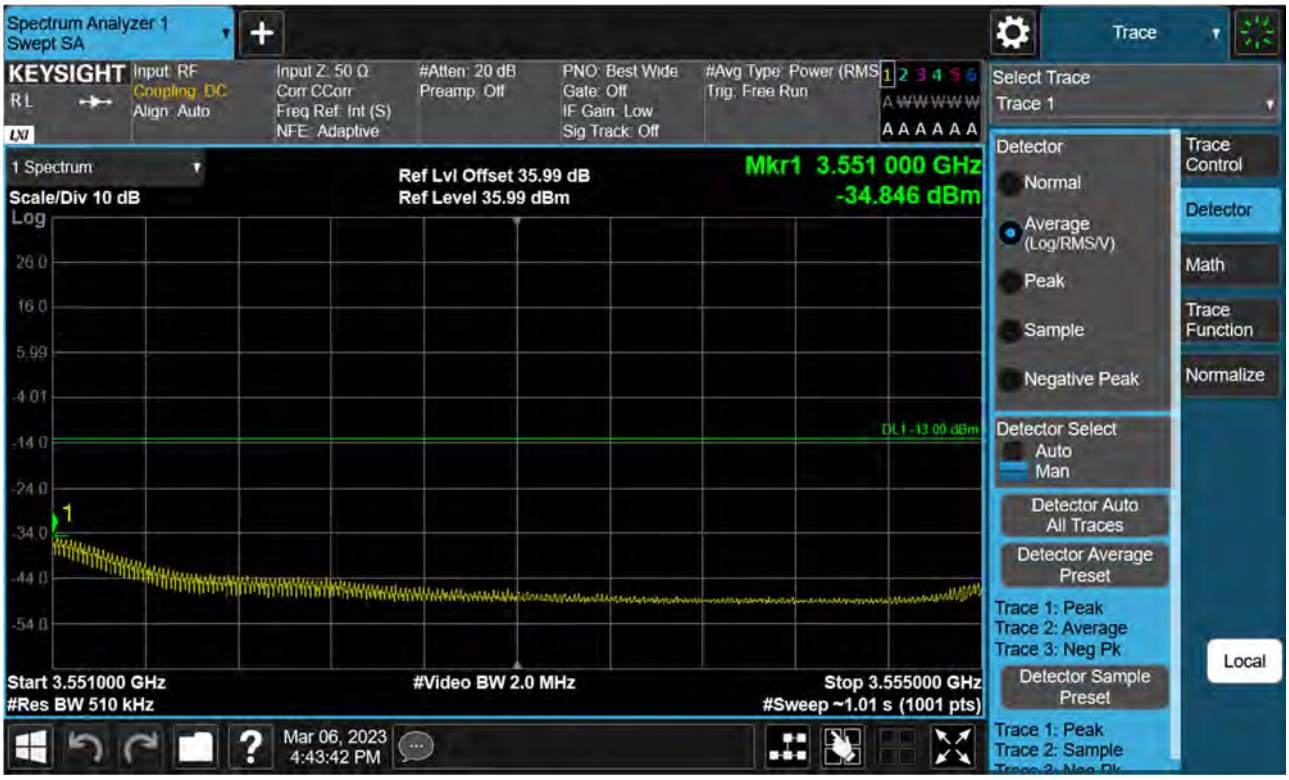
Sub6 n77(78). Low Band Edge Plot (30 M BW Ch.631000 BPSK FullRB)(3)

Sub6 n77(78). High Band Edge Plot (30 M BW Ch.635666 BPSK 1RB)(1)



Sub6 n77(78). High Band Edge Plot (30 M BW Ch.635666 BPSK FullRB)(1)

Sub6 n77(78). High Band Edge Plot (30 M BW Ch.635666 BPSK 1RB)(2)



Sub6 n77(78). High Band Edge Plot (30 M BW Ch.635666 BPSK FullRB)(2)

Sub6 n77(78). High Band Edge Plot (30 M BW Ch.635666 BPSK 1RB)(3)

Sub6 n77(78). High Band Edge Plot (30 M BW Ch.635666 BPSK FullRB)(3)

Sub6 n77(78). Low Band Edge Plot (40 M BW Ch.631334 BPSK 1RB)(1)

Sub6 n77(78). Low Band Edge Plot (40 M BW Ch.631334 BPSK FullRB)(1)

Sub6 n77(78). Low Band Edge Plot (40 M BW Ch.631334 BPSK 1RB)(2)

Sub6 n77(78). Low Band Edge Plot (40 M BW Ch.631334 BPSK FullRB)(2)

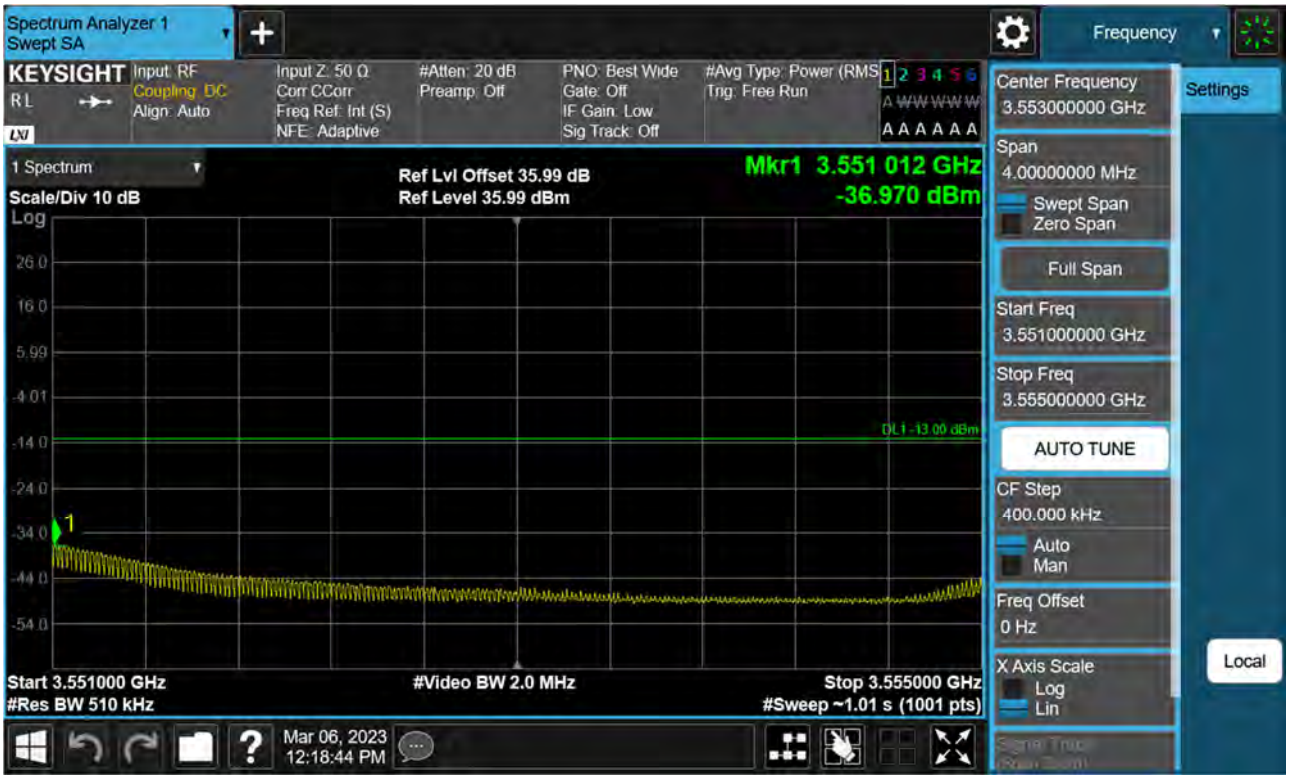
Sub6 n77(78). Low Band Edge Plot (40 M BW Ch.631334 BPSK 1RB)(3)

Sub6 n77(78). Low Band Edge Plot (40 M BW Ch.631334 BPSK FullRB)(3)

Sub6 n77(78). High Band Edge Plot (40 M BW Ch.635332 BPSK 1RB)(1)

Sub6 n77(78). High Band Edge Plot (40 M BW Ch.635332 BPSK FullRB)(1)

Sub6 n77(78). High Band Edge Plot (40 M BW Ch.635332 BPSK 1RB)(2)



Sub6 n77(78). High Band Edge Plot (40 M BW Ch.635332 BPSK FullRB)(2)

Sub6 n77(78). High Band Edge Plot (40 M BW Ch.635332 BPSK 1RB)(3)

Sub6 n77(78). High Band Edge Plot (40 M BW Ch.635332 BPSK FullRB)(3)

Sub6 n77(78). Low Band Edge Plot (50 M BW Ch.631668 BPSK 1RB)(1)

Sub6 n77(78). Low Band Edge Plot (50 M BW Ch.631668 BPSK FullRB)(1)

Sub6 n77(78). Low Band Edge Plot (50 M BW Ch.631668 BPSK 1RB)(2)

Sub6 n77(78). Low Band Edge Plot (50 M BW Ch.631668 BPSK FullRB)(2)

Sub6 n77(78). Low Band Edge Plot (50 M BW Ch.631668 BPSK 1RB)(3)

Sub6 n77(78). Low Band Edge Plot (50 M BW Ch.631668 BPSK FullRB)(3)

Sub6 n77(78). High Band Edge Plot (50 M BW Ch.635000 BPSK 1RB)(1)

Sub6 n77(78). High Band Edge Plot (50 M BW Ch.635000 BPSK FullRB)(1)

Sub6 n77(78). High Band Edge Plot (50 M BW Ch.635000 BPSK 1RB)(2)