FCC RF TEST REPORT

Applicant:	CPSpeed CO.,LTD.
Address:	3505 stLuke's Tower,8-1 Akashi-cho, Chuo-ku, Tokyo 104-0044

Manufacturer or Supplier:	MeiG Smart Technology Co., Ltd
Address:	2nd Floor,Office Building,No.5 Lingxia Road,Fenghuang,Fuyong Street,Bao'an District,Shenzhen
Product:	Speed Wi-Fi DOCK 5G 01
Brand Name:	CPSpeed
Model Name:	CPS01
FCC ID:	2BMKV-CPS01
Date of tests:	Nov. 12, 2024~Dec. 12, 2024

The tests have been carried out according to the requirements of the following standard:

☒ **FCC Part 27, Subpart C, M**
☒ **ANSI/TIA/EIA-603-D**
☒ **FCC Part 2**
☒ **ANSI/TIA/EIA-603-E**
☒ **ANSI C63.26-2015**

CONCLUSION: The submitted sample was found to COMPLY with the test requirement

Prepared by Simon Wang Engineer / Mobile Department	Approved by Luke Lu Manager / Mobile Department
Simon Wang Date: Dec. 12, 2024	Luke Lu Date: Dec. 12, 2024

This report is governed by, and incorporates by reference, the Conditions of Testing as posted at the date of issuance of this report at http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/ and is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. Measurement uncertainty is only provided upon request for accredited tests. Statements of conformity are based on simple acceptance criteria without taking measurement uncertainty into account, unless otherwise requested in writing. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence or if you require measurement uncertainty; provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
W7L-P24090006RF01	Original release	Dec. 12, 2024

1 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC PART 27 & PART 2			
STANDARD SECTION	**TEST TYPE AND LIMIT**	**RESULT**	**TEST LAB***
§2.1046	Conducted Output Power	Compliance	A
§27.50(h)(2) §27.50(j)(3) §27.50(k)(3)	Equivalent Isotropically Radiated Power (5G NR n41, n77, n78)	Compliance	A
§2.1055 §27.54	Frequency Stability	Compliance	A
§2.1049	Occupied Bandwidth	Compliance	A
§2.1051 §27.53(l)(2) §27.53(m)(4)(6) §27.53(n)(2)	Band Edge Measurements	Compliance	A
§2.1051 §27.53(l)(2) §27.53(m)(4)(6) §27.53(n)(2)	Conducted Spurious Emissions	Compliance	A
§2.1053 §27.53(l)(2) §27.53(m)(4)(6) §27.53(n)(2)	Radiated Spurious Emissions	Compliance	A/B
§27.50	Peak-to-Average Ratio	Compliance	A

***Test Lab Information Reference**

Lab A:

BV 7Layers Communications Technology (Shenzhen) Co., Ltd

Lab Address:

Room B37, Warehouse A5, No.3 Chiwan 4th Road, Zhaoshang Street, Nanshan District Shenzhen, Guangdong, People's Republic of China

***Test Lab Information Reference**

Lab B:

Huarui 7Layers High Technology (Suzhou) Co., Ltd.

Lab Address:

Tower N, Innovation Center, 88 Zuyi Road, High-tech District, Suzhou City, Anhui Province

Accredited Test Lab Cert 6613.01

The FCC Site Registration No. is 434559; The Designation No. is CN1325.

1.1 MEASREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

MEASUREMENT	UNCERTAINTY
Frequency Stability	±76.97Hz
Radiated emissions (9KHz~30MHz)	±2.68dB
Radiated emissions & Radiated Power (30MHz~1GHz)	±4.98dB
Radiated emissions & Radiated Power (1GHz ~6GHz)	±4.70dB
Radiated emissions (6GHz ~18GHz)	±4.60dB
Radiated emissions (18GHz ~40GHz)	±4.12dB
Conducted emissions	±4.01dB
Occupied Channel Bandwidth	±43.58KHz
Conducted Output power	±2.06dB
Band Edge Measurements	±4.70dB

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

1.2 TEST SITE AND INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
MXE EMI Receiver	KEYSIGHT	N9038A-544	MY54450026	Mar. 27,24	Mar. 26,25
EXA Signal Analyzer	KEYSIGHT	N9010A-544	MY54510355	May.09,24	May.08,25
Loop Antenna	Schwarzbeck	FMZB 1519B	00173	Sep.01,24	Aug.31,25
Bilog Antenna	ETS-LINDGREN	3143B	00161965	Feb. 17,24	Feb. 16,25
Horn Antenna	ETS-LINDGREN	3117	00168692	Feb. 17,24	Feb. 16,25
Horn Antenna (18GHz-40GHz)	N/A	QWH-SL-18-40-K-SG/QMS-00361	15433	Sep.02, 24	Sep.01, 25
Radio Communication Analyzer	ANRITSU	MT8820C	6201465426	Feb. 13,24	Feb. 12,25
Signal Pre-Amplifier	EMSI	EMC 9135	980249	May. 05,24	May. 04,25
Signal Pre-Amplifier	EMSI	EMC 012645B	980257	May.09,24	May.08,25
Signal Pre-Amplifier	EMSI	EMC 184045B	980259	Feb. 16,24	Feb.15,25
3m Semi-anechoic Chamber	ETS-LINDGREN	9m*6m*6m	Euroshieldpn-CT0001143-1216	Nov. 14,23	Nov. 13,26
Test Software	E3	V 9.160323	N/A	N/A	N/A
Test Software	JS1120	3.1.36	N/A	N/A	N/A
10dB Attenuator	JFW/USA	50HF-010-SMA	50HF-010-SMA	May. 05,24	May. 04,25
Power Meter	Anritsu	ML2495A	1506002	Feb. 13,24	Feb. 12,25
Power Sensor	Anritsu	MA2411B	1339352	Feb. 13,24	Feb. 12,25
Temperature Chamber	ESPEC	SH-242	93000855	May. 05,24	May. 04,25
MXG Analog Microvave Signal Generator	KEYSIGHT	N5183A	MY50143024	Feb. 13,24	Feb. 12,25
Base station R&S CMW500	Rohde&Schwarz	CMW500	153085	May.09,24	May.08,25
DC Source	Kikusui/JP	PMX18-5A	N/A	Aug. 10,24	Aug. 09,25
Power Divider	COM-MW	ZPD8-2M0-40G-1942	04223131	Oct.08.24	Oct.07.25

NOTE: 1. The calibration interval of the above test instruments is 12 months or 36 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.

2. The test was performed in 3m Semi-anechoic Chamber and RF Oven Room.

3. The horn antenna is used only for the measurement of emission frequency above 1GHz if tested.

4. The FCC Site Registration No. is 525120; The Designation No. is CN1171.

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Pre-Amplifier	R&S	SCU18F1	100815	Aug.29,24	Aug.28,26
Pre-Amplifier	R&S	SCU08F1	101028	Sep.15,24	Sep.14,26
Vector Signal Generator	R&S	SMBV100B	102176	Mar.29,24	Mar.28,26
Signal Generator	R&S	SMB100A	182185	Mar.29,24	Mar.28,26
3m Fully-anechoic Chamber	TDK	9m*6m*6m	HRSW-SZ-EMC-01Chamber	Nov.25,22	Nov.24,25
3m Semi-anechoic Chamber	TDK	9m*6m*6m	HRSW-SZ-EMC-02Chamber	Nov.25,22	Nov.24,25
EMI TEST Receiver	R&S	ESR26	101734	Mar.28,24	Mar.27,26
EMI TEST Receiver	R&S	ESW44	101973	Mar.28,24	Mar.27,26
Bilog Antenna	SCHWARZBECK	VULB 9163	1264	Dec.26,23	Dec.25,25
Horn Antenna	ETS-LINDGREN	3117	227836	Aug.21,24	Aug.20,26
Horn Antenna (18GHz-40GHz)	Steatite Q-par Antennas	QMS 00880	23486	Jul.15,24	Jul.14,26
Horn Antenna	Steatite Q-par Antennas	QMS 00208	23485	Aug.21,24	Aug.20,26
Loop Antenna	SCHWARZ	HFH2-Z2/Z2E	100976	Feb.22,24	Feb.21,26
WIDEBANDRADIO COMMUNICATION TESTER	R&S	CMW500	169399	Jun.19,24	Jun.18,26
Test Software	EMC32	EMC32	N/A	N/A	N/A
6DB attenuator	Tonscend Technology Co., Ltd	N/A	23062787	N/A	N/A
Test Software	ELEKTRA	ELEKTRA4.32	N/A	N/A	N/A
Open Switch and Control Unit	R&S	OSP220	101964	Sep.30,24	Sep.29,26
DC Source	HYELEC	HY3010B	551016	Aug.30,24	Aug.29,26
Hygrothermograph	DELI	20210528	SZ014	Sep.05,24	Sep.04,26
PC	LENOVO	E14	HRSW0024	N/A	N/A
TMC-AMI18843A(CABLE)	R&S	HF290-NMNM-7.00M	N/A	N/A	N/A
TMC-AMI18843A(CABLE)	R&S	HF290-NMNM-4.00M	N/A	N/A	N/A
CABLE	R&S	W13.02	N/A	Apr.27,24	Apr.26,25
CABLE	R&S	W12.14	N/A	Apr.27,24	Apr.26,25
CABLE	R&S	J12J103539-00-1	SEP-03-20-069	Apr.27,24	Apr.26,25
CABLE	R&S	J12J103539-00-1	SEP-03-20-070	Apr.27,24	Apr.26,25
Temperature Chamber	votsch	VT4002	58566078100050	May.30,24	May.29,26

NOTE: 1. The calibration interval of the above test instruments is 12/ 24/ 36 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.

2. The test was performed in 3m Semi-anechoic Chamber and RF Oven Room.

3. The horn antenna is used only for the measurement of emission frequency above 1GHz if tested.
4. The FCC Site Registration No. is 434559; The Designation No. is CN1325.

2 GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

PRODUCT	Speed Wi-Fi DOCK 5G 01	
BRAND NAME	CPSpeed	
MODEL NAME	CPS01	
NOMINAL VOLTAGE	5.0Vdc(adapter or host equipment) 3.85Vdc (Li-ion, battery)	
MODULATION TECHNOLOGY	**5G NR**	DFT-s-OFDM(Pi/2BPSK,QPSK,16QAM,64QAM,256QAM); CP-OFDM(QPSK,16QAM,64QAM,256QAM);
LTE ANCHOR BAND FOR NR BAND	**NR Band n41**	/
	NR Band n77(Part27Q)	LTE Band 41
	NR Band n77(Part27O)	LTE Band 41
	NR Band n78(Part27Q)	/
FREQUENCY RANGE	**NR Band n41**	2550MHz ~ 2649.99MHz
	NR Band n77(Part27Q)	3455.01MHz ~ 3544.98MHz
	NR Band n77(Part27O)	3705MHz ~ 3975MHz
	NR Band n78(Part27Q)	3455.01MHz ~ 3544.98MHz
EMISSION DESIGNATOR	**NR Band n41 Channel Bandwidth: 10MHz**	QPSK: 8M60G7D 16QAM: 8M59W7D 64QAM: 8M57W7D 256QAM: 8M56W7D Pi/2BPSK: 8M58G7D
	NR Band n41 Channel Bandwidth: 15MHz	QPSK: 12M8G7D 16QAM: 12M8W7D 64QAM: 12M9W7D 256QAM: 12M8W7D Pi/2BPSK: 12M8G7D
	NR Band n41 Channel Bandwidth: 20MHz	QPSK: 17M8G7D 16QAM: 17M9W7D 64QAM: 17M8W7D 256QAM: 17M8W7D Pi/2BPSK: 17M8G7D

EMISSION DESIGNATOR	**NR Band n41 Channel Bandwidth: 30MHz**	QPSK: 26M8G7D 16QAM: 26M8W7D 64QAM: 26M8W7D 256QAM: 26M8W7D Pi/2BPSK: 26M8G7D
	NR Band n41 Channel Bandwidth: 40MHz	QPSK: 35M7G7D 16QAM: 35M8W7D 64QAM: 35M8W7D 256QAM: 35M7W7D Pi/2BPSK: 35M7G7D
	NR Band n41 Channel Bandwidth 50MHz	QPSK: 45M7G7D 16QAM: 45M7W7D 64QAM: 45M7W7D 256QAM: 45M7W7D Pi/2BPSK: 45M7G7D
	NR Band n41 Channel Bandwidth 60MHz	QPSK: 57M9G7D 16QAM: 57M7W7D 64QAM: 57M8W7D 256QAM: 57M8W7D Pi/2BPSK: 57M8G7D
	NR Band n41 Channel Bandwidth 70MHz	QPSK: 64M2G7D 16QAM: 64M2W7D 64QAM: 64M1W7D 256QAM: 64M1W7D Pi/2BPSK: 64M1W7D
	NR Band n41 Channel Bandwidth 80MHz	QPSK: 77M0G7D 16QAM: 76M8W7D 64QAM: 77M1W7D 256QAM: 77M0W7D Pi/2BPSK: 77M0G7D
	NR Band n41 Channel Bandwidth 90MHz	QPSK: 86M4G7D 16QAM: 86M7W7D 64QAM: 86M3W7D 256QAM: 86M3W7D Pi/2BPSK: 86M5G7D
	NR Band n41 Channel Bandwidth 100MHz	QPSK: 96M1G7D 16QAM: 96M1W7D 64QAM: 96M0W7D 256QAM: 96M0W7D Pi/2BPSK: 96M0G7D

EMISSION DESIGNATOR	**NR Band 77(Part27Q)-SISO Channel Bandwidth: 10MHz**	QPSK: 8M58G7D 16QAM: 8M57W7D 64QAM: 8M57W7D 256QAM: 8M56W7D Pi/2BPSK: 8M58G7D
	NR Band 77(Part27Q) -SISO Channel Bandwidth: 15MHz	QPSK: 12M8G7D 16QAM: 12M8W7D 64QAM: 12M8W7D 256QAM: 12M8W7D Pi/2BPSK: 12M8G7D
	NR Band 77(Part27Q) -SISO Channel Bandwidth: 20MHz	QPSK: 17M8G7D 16QAM: 17M9W7D 64QAM: 17M8W7D 256QAM: 17M8W7D Pi/2BPSK: 17M8G7D
	NR Band 77(Part27 Q) -SISO Channel Bandwidth: 30MHz	QPSK: 26M7G7D 16QAM: 26M7W7D 64QAM: 26M7W7D 256QAM: 26M8W7D Pi/2BPSK: 26M7G7D
	NR Band 77(Part27 Q) -SISO Channel Bandwidth: 40MHz	QPSK: 35M7G7D 16QAM: 35M7W7D 64QAM: 35M8W7D 256QAM: 35M7W7D Pi/2BPSK: 35M7G7D
	NR Band 77(Part27Q) -SISO Channel Bandwidth: 50MHz	QPSK: 45M7G7D 16QAM: 45M7W7D 64QAM: 45M7W7D 256QAM: 45M7W7D Pi/2BPSK: 45M7G7D
	NR Band 77(Part27Q) -SISO Channel Bandwidth: 60MHz	QPSK: 57M9G7D 16QAM: 57M7W7D 64QAM: 57M7W7D 256QAM: 57M7W7D Pi/2BPSK: 57M8G7D
	NR Band 77(Part27Q) -SISO Channel Bandwidth: 70MHz	QPSK: 64M2G7D 16QAM: 64M2W7D 64QAM: 64M2W7D 256QAM: 64M1W7D Pi/2BPSK: 64M2G7D

EMISSION DESIGNATOR	**NR Band 77(Part27Q) -SISO Channel Bandwidth: 80MHz**	QPSK: 77M0G7D 16QAM: 76M9W7D 64QAM: 77M1W7D 256QAM: 77M0W7D Pi/2BPSK: 76M9G7D
	NR Band 77(Part27Q) -SISO Channel Bandwidth: 90MHz	QPSK: 86M6G7D 16QAM: 86M8W7D 64QAM: 86M4W7D 256QAM: 86M5W7D Pi/2BPSK: 86M6G7D
	NR Band 77(Part27Q) -SISO Channel Bandwidth: 100MHz	QPSK: 96M3G7D 16QAM: 96M3W7D 64QAM: 96M2W7D 256QAM: 96M2W7D Pi/2BPSK: 96M1G7D
	NR Band 77(Part27O) -SISO Channel Bandwidth: 10MHz	QPSK: 8M58G7D 16QAM: 8M60W7D 64QAM: 8M57W7D 256QAM: 8M56W7D Pi/2BPSK: 8M58G7D
	NR Band 77(Part27O) -SISO Channel Bandwidth: 15MHz	QPSK: 12M8G7D 16QAM: 12M8W7D 64QAM: 12M9W7D 256QAM: 12M9W7D Pi/2BPSK: 12M8G7D
	NR Band 77(Part27O) -SISO Channel Bandwidth: 20MHz	QPSK: 17M8G7D 16QAM: 17M9W7D 64QAM: 17M8W7D 256QAM: 17M8W7D Pi/2BPSK: 17M8G7D
	NR Band 77(Part27O) -SISO Channel Bandwidth: 30MHz	QPSK: 26M7G7D 16QAM: 26M7W7D 64QAM: 26M7W7D 256QAM: 26M8W7D Pi/2BPSK: 26M8G7D
	NR Band 77(Part27O) -SISO Channel Bandwidth: 40MHz	QPSK: 35M7G7D 16QAM: 35M8W7D 64QAM: 35M8W7D 256QAM: 35M7W7D Pi/2BPSK: 35M7G7D

EMISSION DESIGNATOR	NR Band 77(Part27O) -SISO Channel Bandwidth: 50MHz	QPSK: 45M7G7D 16QAM: 45M7W7D 64QAM: 45M7W7D 256QAM: 45M7W7D Pi/2BPSK: 45M7G7D
	NR Band 77(Part27O) -SISO Channel Bandwidth: 60MHz	QPSK: 57M8G7D 16QAM: 57M7W7D 64QAM: 57M8W7D 256QAM: 57M7W7D Pi/2BPSK: 57M8G7D
	NR Band 77(Part27O) -SISO Channel Bandwidth: 70MHz	QPSK: 64M3G7D 16QAM: 64M2W7D 64QAM: 64M2W7D 256QAM: 64M1W7D Pi/2BPSK: 64M1G7D
	NR Band 77(Part27O) -SISO Channel Bandwidth: 80MHz	QPSK: 77M0G7D 16QAM: 76M9W7D 64QAM: 77M1W7D 256QAM: 77M0W7D Pi/2BPSK: 76M9G7D
	NR Band 77(Part27O) -SISO Channel Bandwidth: 90MHz	QPSK: 86M6G7D 16QAM: 86M8W7D 64QAM: 86M4W7D 256QAM: 86M5W7D Pi/2BPSK: 86M6G7D
	NR Band 77(Part27O) -SISO Channel Bandwidth: 100MHz	QPSK: 96M3G7D 16QAM: 96M3W7D 64QAM: 96M2W7D 256QAM: 96M1W7D Pi/2BPSK: 96M1G7D
	NR Band 77(Part27Q)-MIMO-ANT2 Channel Bandwidth: 10MHz	QPSK: 8M61G7D 16QAM: 8M59W7D 64QAM: 8M62W7D 256QAM: 8M59W7D
	NR Band 77(Part27Q) -MIMO-ANT2 Channel Bandwidth: 15MHz	QPSK: 13M5G7D 16QAM: 13M6W7D 64QAM: 13M5W7D 256QAM: 13M6W7D

EMISSION DESIGNATOR	**NR Band 77(Part27Q) MIMO-ANT2 Channel Bandwidth: 20MHz**	QPSK: 18M2G7D 16QAM: 18M2W7D 64QAM: 18M2W7D 256QAM: 18M2W7D
	NR Band 77(Part27 Q) MIMO-ANT2 Channel Bandwidth: 30MHz	QPSK: 27M8G7D 16QAM: 27M8W7D 64QAM: 27M8W7D 256QAM: 27M8W7D
	NR Band 77(Part27 Q) MIMO-ANT2 Channel Bandwidth: 40MHz	QPSK: 37M7G7D 16QAM: 37M8W7D 64QAM: 37M8W7D 256QAM: 37M8W7D
	NR Band 77(Part27Q) MIMO-ANT2 Channel Bandwidth: 50MHz	QPSK: 47M4G7D 16QAM: 47M5W7D 64QAM: 47M4W7D 256QAM: 47M4W7D
	NR Band 77(Part27Q) -MIMO-ANT2 Channel Bandwidth: 60MHz	QPSK: 57M8G7D 16QAM: 57M7W7D 64QAM: 57M7W7D 256QAM: 57M7W7D
	NR Band 77(Part27Q) -MIMO-ANT2 Channel Bandwidth: 70MHz	QPSK: 67M4G7D 16QAM: 67M5W7D 64QAM: 67M4W7D 256QAM: 67M4W7D
	NR Band 77(Part27Q) -MIMO-ANT2 Channel Bandwidth: 80MHz	QPSK: 77M3G7D 16QAM: 77M2W7D 64QAM: 77M2W7D 256QAM: 77M2W7D
	NR Band 77(Part27Q) - MIMO-ANT2 Channel Bandwidth: 90MHz	QPSK: 87M2G7D 16QAM: 87M3W7D 64QAM: 87M4W7D 256QAM: 87M4W7D
	NR Band 77(Part27Q) - MIMO-ANT2 Channel Bandwidth: 100MHz	QPSK: 97M2G7D 16QAM: 97M2W7D 64QAM: 97M3W7D 256QAM: 97M2W7D
	NR Band 77(Part27Q)-MIMO-ANT4 Channel Bandwidth: 10MHz	QPSK: 8M58G7D 16QAM: 8M59W7D 64QAM: 8M57W7D 256QAM: 8M56W7D

EMISSION DESIGNATOR	**NR Band 77(Part27Q) -MIMO-ANT4 Channel Bandwidth: 15MHz**	QPSK: 13M6G7D 16QAM: 13M6W7D 64QAM: 13M6W7D 256QAM: 13M6W7D
	NR Band 77(Part27Q) MIMO-ANT4 Channel Bandwidth: 20MHz	QPSK: 18M2G7D 16QAM: 18M2W7D 64QAM: 18M2W7D 256QAM: 18M2W7D
	NR Band 77(Part27 Q) MIMO-ANT4 Channel Bandwidth: 30MHz	QPSK: 27M8G7D 16QAM: 27M8W7D 64QAM: 27M8W7D 256QAM: 27M8W7D
	NR Band 77(Part27 Q) MIMO-ANT4 Channel Bandwidth: 40MHz	QPSK: 37M8G7D 16QAM: 37M8W7D 64QAM: 37M7W7D 256QAM: 37M8W7D
	NR Band 77(Part27Q) MIMO--ANT4 Channel Bandwidth: 50MHz	QPSK: 47M4G7D 16QAM: 47M5W7D 64QAM: 47M4W7D 256QAM: 47M5W7D
	NR Band 77(Part27Q) -MIMO-ANT4 Channel Bandwidth: 60MHz	QPSK: 57M7G7D 16QAM: 57M8W7D 64QAM: 57M7W7D 256QAM: 57M6W7D
	NR Band 77(Part27Q) -MIMO-ANT4 Channel Bandwidth: 70MHz	QPSK: 67M4G7D 16QAM: 67M4W7D 64QAM: 67M4W7D 256QAM: 67M3W7D
	NR Band 77(Part27Q) --MIMO-ANT4 Channel Bandwidth: 80MHz	QPSK: 77M5G7D 16QAM: 77M2W7D 64QAM: 77M3W7D 256QAM: 77M3W7D
	NR Band 77(Part27Q) - MIMO-ANT4 Channel Bandwidth: 90MHz	QPSK: 87M2G7D 16QAM: 87M3W7D 64QAM: 87M2W7D 256QAM: 87M2W7D

EMISSION DESIGNATOR	NR Band 77(Part27Q) - MIMO-ANT4 Channel Bandwidth: 100MHz	QPSK: 97M2G7D 16QAM: 97M4W7D 64QAM: 97M4W7D 256QAM: 97M4W7D
	NR Band 77(Part27O) – MIMO-ANT2 Channel Bandwidth: 10MHz	QPSK: 8M60G7D 16QAM: 8M60W7D 64QAM: 8M60W7D 256QAM: 8M60W7D
	NR Band 77(Part27O) - MIMO-ANT2 Channel Bandwidth: 15MHz	QPSK: 13M6G7D 16QAM: 13M6W7D 64QAM: 13M5W7D 256QAM: 13M6W7D
	NR Band 77(Part27O) - MIMO-ANT2 Channel Bandwidth: 20MHz	QPSK: 18M2G7D 16QAM: 18M2W7D 64QAM: 18M2W7D 256QAM: 18M2W7D
	NR Band 77(Part27O) - MIMO-ANT2 Channel Bandwidth: 30MHz	QPSK: 27M8G7D 16QAM: 27M8W7D 64QAM: 27M8WD 256QAM: 27M8W7D
	NR Band 77(Part27O) - MIMO-ANT2 Channel Bandwidth: 40MHz	QPSK: 37M7G7D 16QAM: 37M7W7D 64QAM: 37M8W7D 256QAM: 37M8W7D
	NR Band 77(Part27O) - MIMO-ANT2 Channel Bandwidth: 50MHz	QPSK: 47M4G7D 16QAM: 47M5W7D 64QAM: 47M4W7D 256QAM: 47M4W7D
	NR Band 77(Part27O) - MIMO-ANT2 Channel Bandwidth: 60MHz	QPSK: 57M8G7D 16QAM: 57M7W7D 64QAM: 57M7W7D 256QAM: 57M7W7D
	NR Band 77(Part27O) - MIMO-ANT2 Channel Bandwidth: 70MHz	QPSK: 67M4G7D 16QAM: 67M5W7D 64QAM: 67M4W7D 256QAM: 67M5W7D

EMISSION DESIGNATOR	NR Band 77(Part27O) - MIMO-ANT2 Channel Bandwidth: 80MHz	QPSK: 77M2G7D 16QAM: 77M3W7D 64QAM: 77M2W7D 256QAM: 77M2W7D
	NR Band 77(Part27O) - MIMO-ANT2 Channel Bandwidth: 90MHz	QPSK: 87M3G7D 16QAM: 87M3W7D 64QAM: 87M4W7D 256QAM: 87M5W7D
	NR Band 77(Part27O) - MIMO-ANT2 Channel Bandwidth: 100MHz	QPSK: 97M3G7D 16QAM: 97M2W7D 64QAM: 97M3W7D 256QAM: 97M2W7D
	NR Band 77(Part27O) - MIMO-ANT4 Channel Bandwidth: 10MHz	QPSK: 8M59G7D 16QAM: 8M59W7D 64QAM: 8M58W7D 256QAM: 8M57W7D
	NR Band 77(Part27O) - MIMO-ANT4 Channel Bandwidth: 15MHz	QPSK: 13M6G7D 16QAM: 13M6W7D 64QAM: 13M6W7D 256QAM: 13M6W7D
	NR Band 77(Part27O) - MIMO-ANT4 Channel Bandwidth: 20MHz-ANT4	QPSK: 18M2G7D 16QAM: 18M2W7D 64QAM: 18M2W7D 256QAM: 18M2W7D
	NR Band 77(Part27O) - MIMO-ANT4 Channel Bandwidth: 30MHz	QPSK: 27M9G7D 16QAM: 27M8W7D 64QAM: 27M9WD 256QAM: 27M8W7D
	NR Band 77(Part27O) - MIMO-ANT4 Channel Bandwidth: 40MHz	QPSK: 37M8G7D 16QAM: 37M9W7D 64QAM: 37M8W7D 256QAM: 37M9W7D
	NR Band 77(Part27O) - MIMO-ANT4Channel Bandwidth: 50MHz	QPSK: 47M4G7D 16QAM: 47M5W7D 64QAM: 47M5W7D 256QAM: 47M5W7D

EMISSION DESIGNATOR	NR Band 77(Part27O) - MIMO-ANT4 Channel Bandwidth: 60MHz	QPSK: 57M8G7D 16QAM: 57M8W7D 64QAM: 57M8W7D 256QAM: 57M7W7D
	NR Band 77(Part27O) - MIMO-ANT4 Channel Bandwidth: 70MHz	QPSK: 67M5G7D 16QAM: 67M5W7D 64QAM: 67M5W7D 256QAM: 67M4W7D
	NR Band 77(Part27O) - MIMO-ANT4 Channel Bandwidth: 80MHz	QPSK: 77M6G7D 16QAM: 77M3W7D 64QAM: 77M4W7D 256QAM: 77M4W7D
	NR Band 77(Part27O) - MIMO-ANT4 Channel Bandwidth: 90MHz	QPSK: 87M4G7D 16QAM: 87M4W7D 64QAM: 87M4W7D 256QAM: 87M3W7D
	NR Band 77(Part27O) - MIMO-ANT4 Channel Bandwidth: 100MHz	QPSK: 97M4G7D 16QAM: 97M6W7D 64QAM: 97M5W7D 256QAM: 97M5W7D
5G SA MAX. EIRP POWER	NR Band n41 Channel Bandwidth: 10MHz	289.73mW
	NR Band n41 Channel Bandwidth: 15MHz	296.48mW
	NR Band n41 Channel Bandwidth: 20MHz	285.76mW
	NR Band n41 Channel Bandwidth: 40MHz	293.76mW
	NR Band n41 Channel Bandwidth: 50MHz	285.76mW
	NR Band n41 Channel Bandwidth: 60MHz	294.44mW

5G SA MAX. EIRP POWER	NR Band n41 Channel Bandwidth: 70MHz	283.79mW
	NR Band n41 Channel Bandwidth: 80MHz	288.4mW
	NR Band n41 Channel Bandwidth: 90MHz	289.73mW
	NR Band n41 Channel Bandwidth: 100MHz	295.12mW
	NR Band 77(Part27Q) -SISO Channel Bandwidth: 10MHz	311.17mW
	NR Band 77(Part27Q) -SISO Channel Bandwidth: 15MHz	310.46mW
	NR Band 77(Part27Q) -SISO Channel Bandwidth: 20MHz	309.03mW
	NR Band 77(Part27Q) -SISO Channel Bandwidth: 30MHz	316.23mW
	NR Band 77(Part27Q) -SISO Channel Bandwidth: 40MHz	316.23mW
	NR Band 77(Part27Q) -SISO Channel Bandwidth: 50MHz	316.23mW
	NR Band 77(Part27Q) -SISO Channel Bandwidth: 60MHz	311.89mW
	NR Band 77(Part27Q) -SISO Channel Bandwidth: 70MHz	314.77mW

5G SA MAX. EIRP POWER	NR Band 77(Part27Q) -SISO Channel Bandwidth: 80MHz	304.09mW
	NR Band 77(Part27Q) -SISO Channel Bandwidth: 90MHz	313.33mW
	NR Band 77(Part27Q) -SISO Channel Bandwidth: 100MHz	317.69mW
	NR Band 77(Part27O)-SISO Channel Bandwidth: 10MHz	285.76mW
	NR Band 77(Part27O) -SISO Channel Bandwidth: 20MHz	289.07mW
	NR Band 77(Part27O) -SISO Channel Bandwidth: 30MHz	283.79mW
	NR Band 77(Part27O) -SISO Channel Bandwidth: 40MHz	287.74mW
	NR Band 77(Part27O) -SISO Channel Bandwidth: 50MHz	277.97mW
	NR Band 77(Part27O) -SISO Channel Bandwidth: 60MHz	278.61mW
	NR Band 77(Part27O) -SISO Channel Bandwidth: 70MHz	286.42mW
	NR Band 77(Part27O) -SISO Channel Bandwidth: 80MHz	291.74mW
	NR Band 77(Part27O) -SISO Channel Bandwidth: 90MHz	289.73mW

5G SA MAX. EIRP POWER	NR Band 77(Part27O) -SISO Channel Bandwidth: 100MHz	292.42mW
	NR Band 78(Part27Q) -SISO Channel Bandwidth: 10MHz	293.76mW
	NR Band 78(Part27Q) -SISO Channel Bandwidth: 20MHz	301.3mW
	NR Band 78(Part27Q) -SISO Channel Bandwidth: 30MHz	298.54mW
	NR Band 78(Part27Q) -SISO Channel Bandwidth: 40MHz	297.17mW
	NR Band 78(Part27Q) -SISO Channel Bandwidth: 50MHz	297.85mW
	NR Band 78(Part27Q) -SISO Channel Bandwidth: 60MHz	295.12mW
	NR Band 78(Part27Q) -SISO Channel Bandwidth: 70MHz	296.48mW
	NR Band 78(Part27Q) -SISO Channel Bandwidth: 80MHz	300.61mW
	NR Band 78(Part27Q) -SISO Channel Bandwidth: 90MHz	297.85mW
	NR Band 78(Part27Q) -SISO Channel Bandwidth: 100MHz	302.69mW
	NR Band 77(Part27Q) -MIMO Channel Bandwidth: 10MHz	565.05mW

5G SA MAX. EIRP POWER	NR Band 77(Part27Q) --MIMO Channel Bandwidth: 20MHz	566.35mW
	NR Band 77(Part27Q) -MIMO Channel Bandwidth: 30MHz	565.05mW
	NR Band 77(Part27Q) -MIMO Channel Bandwidth: 40MHz	562.45mW
	NR Band 77(Part27Q) --MIMO Channel Bandwidth: 50MHz	568.97mW
	NR Band 77(Part27Q) --MIMO Channel Bandwidth: 60MHz	568.97mW
	NR Band 77(Part27Q) --MIMO Channel Bandwidth: 70MHz	567.66 mW
	NR Band 77(Part27Q) -MIMO Channel Bandwidth: 80MHz	566.35mW
	NR Band 77(Part27Q) --MIMO Channel Bandwidth: 90MHz	566.35mW
	NR Band 77(Part27Q) -MIMO Channel Bandwidth: 100MHz	574.23mW
	NR Band 77(Part27O)- -MIMO Channel Bandwidth: 10MHz	562.45mW
	NR Band 77(Part27O) -MIMO Channel Bandwidth: 20MHz	557.3mW
	NR Band 77(Part27O) -MIMO Channel Bandwidth: 30MHz	559.87mW

5G SA MAX. EIRP POWER	**NR Band 77(Part27O) -MIMO Channel Bandwidth: 40MHz**	565.05mW
	NR Band 77(Part27O) -MIMO Channel Bandwidth: 50MHz	567.66mW
	NR Band 77(Part27O) -MIMO Channel Bandwidth: 60MHz	557.3mW
	NR Band 77(Part27O) -MIMO Channel Bandwidth: 70MHz	561.16mW
	NR Band 77(Part27O) -MIMO Channel Bandwidth: 80MHz	568.97mW
	NR Band 77(Part27O) -MIMO Channel Bandwidth: 90MHz	562.45mW
	NR Band 77(Part27O) -MIMO Channel Bandwidth: 100MHz	571.59mW
ANTENNA TYPE	5G SA ANT A2: IFA/ Monopole Antenna 1.2 dBi gain for NR Band n41 IFA/ Monopole Antenna 1.5 dBi gain for NR Band n77/n78 ANT A4: IFA/ Monopole Antenna 1.7 dBi gain for NR Band n77	
HW VERSION	CPS01_V1.03	
SW VERSION	CPS01_D.0.5_EQ101	
I/O PORTS	Refer to user's manual	
CABLE SUPPLIED	N/A	
EXTREME TEMPERATURE	0-35 ℃	
EXTREME VOLTAGE	3.6V - 4.3V	

NOTE:

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.

2. The EUT incorporates a MIMO function for N77 and a siso function for N41/78.

MODULATION MODE	TX FUNCTION
N41/78	1TX
N77	2TX

3. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.
4. Antenna gain and EUT conducted cable loss are provided by the customer, and the laboratory will record the results based on these items that involve these two parameters.
5. Max ERP/EIRP is according to Max conducted power calculate for SA.
6. For MIMO mode, the directional gain was calculated by the following equation of KDB 662911 D01 v02r01:

$$DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right].$$

Where

Each antenna is driven by no more than one spatial stream;

N_{SS} = the number of independent spatial streams of data;

N_{ANT} = the total number of antennas;

$g_{j,k} = 10^{G_K/20}$ if the kth antenna is being fed by spatial stream j, or zero if it is not;

G_k is the gain in dBi of the kth antenna.

The directional gain is calculated as following table:

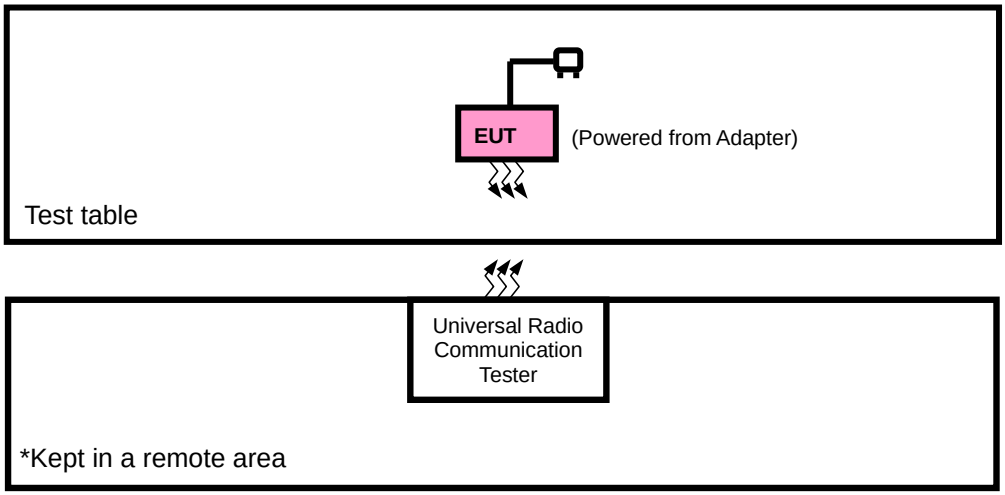
Band	Ant A3(dBi)	Ant A4(dBi)	Directional Gain(dBi)
N77	1.5	1.7	4.61

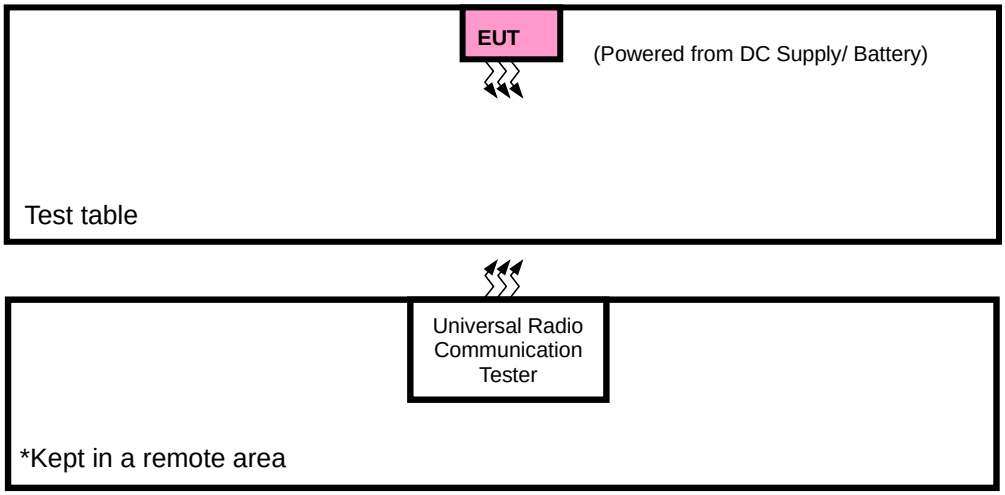
7. **List of Accessory:**

ACCESSORIES	BRAND	MANUFACTURER	MODEL	SPECIFICATION
LCD Panel 1	ZZW	Shenzhen Zoneway Technology Co.,Ltd	ZZW240QBS-1499A	N/A
LCD Panel 2	Rouxian	Chongqing Rouxian Intelligent Technology Co., Ltd	24JS1199-QT	N/A
LCD Panel 3	Yiou	Hubei Yiou Electronics Co.,Ltd.	TBD	N/A
Battery 1	BYD	Shenzhen BYD Lithium Battery Company Limited	CPS01-CSL345683	Capacity: 5400mAh
Battery 2	ATL	Dongguan Amperex Technology Limited	CPS01-345683	Capacity: 5400mAh
AC Adapter 1	N/A	N/A	N/A	I/P: 100-240Vac, 500mA, 50-60Hz, O/P: 5 Vdc, 2.5A (Normal charge) O/P: 9Vdc, 1.7A or 12Vdc, 1.25A (Fast Charge)
AC Adapter 2	N/A	N/A	N/A	I/P: 100-240Vac, 500mA, 50-60Hz, O/P: 5 Vdc, 2.5A (Normal charge) O/P: 9Vdc, 1.7A or 12Vdc, 1.25A (Fast Charge)

2.2 CONFIGURATION OF SYSTEM UNDER TEST

FOR RADIATION EMISSION TEST





2.3 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	DC source	LONG WEI	PS-6403D	010934269	N/A

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	DC Line: Unshielded, Detachable 1.8m

2.4 TEST ITEM AND TEST CONFIGURATION

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, XYZ axis and antenna ports The worst case was found when positioned on Y-plane for EIRP and X-axis for radiated emission. Following channel(s) was (were) selected for the final test as listed below:

EUT CONFIGURE MODE	DESCRIPTION
A	**EUT + Adapter + USB Cable with 5G NR link**
B	**EUT + DC Supply with 5G NR link**

5G NR n41 MODE

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CP-OFDM CHANNEL	AVAILABLE DFT-S-OFDM CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE(DFT-S-OFDM) (INCLUDE CP-OFDM)
A	EIRP	510000 to 529998	510000 to 529998	Low, Middle, High	10MHz	QPSK,	1RB/ 0RB Offset
		510498 to 529500	510498 to 529500	Low, Middle, High	15MHz	QPSK,	1RB/ 0RB Offset
		510996 to 528996	510996 to 528996	Low, Middle, High	20MHz	QPSK,	1RB/ 0RB Offset
		513000 to 526998	513000 to 526998	Low, Middle, High	40MHz	QPSK	1RB/ 0RB Offset
		514002 to 525996	514002 to 525996	Low, Middle, High	50MHz	QPSK	1RB/ 0RB Offset
		515004 to 525000	515004 to 525000	Low, Middle, High	60MHz	QPSK	1RB/ 0RB Offset
		516000 to 523998	516000 to 523998	Low, Middle, High	70MHz	QPSK	1RB/ 0RB Offset
		517002 to 522996	517002 to 522996	Low, Middle, High	80MHz	QPSK	1RB/ 0RB Offset
		518004 to 522000	518004 to 522000	Low, Middle, High	90MHz	QPSK	1RB/ 0RB Offset
		519000 to 520998	519000 to 520998	Low, Middle, High	100MHz	Pi/2BPSK,QPSK,16QAM, 64QAM, 256QAM	1RB/ 0RB Offset
A	FREQUENCY STABILITY	510996 to 528996	510996 to 528996	Low, Middle, High	20MHz	QPSK	Outer_ Full
A	PEAK TO AVERAGE RATIO	510996 to 528996	510996 to 528996	Low, Middle, High	20MHz	QPSK	1RB/ 0RB Offset
							Outer_ Full
A	OCCUPIED BANDWIDTH	510000 to 529998	510000 to 529998	Middle	10MHz	Pi/2BPSK,QPSK,16QAM, 64QAM, 256QAM	Outer_ Full
		510498 to 529500	510498 to 529500	Middle	15MHz	Pi/2BPSK,QPSK,16QAM, 64QAM, 256QAM	Outer_ Full
		510996 to 528996	510996 to 528996	Middle	20MHz	Pi/2BPSK,QPSK,16QAM, 64QAM, 256QAM	Outer_ Full
		513000 to 526998	513000 to 526998	Middle	40MHz	Pi/2BPSK,QPSK,16QAM, 64QAM, 256QAM	Outer_ Full
		514002 to 525996	514002 to 525996	Middle	50MHz	Pi/2BPSK,QPSK,16QAM, 64QAM, 256QAM	Outer_ Full
		515004 to 525000	515004 to 525000	Middle	60MHz	Pi/2BPSK,QPSK,16QAM, 64QAM, 256QAM	Outer_ Full
		516000 to 523998	516000 to 523998	Middle	70MHz	Pi/2BPSK,QPSK,16QAM, 64QAM, 256QAM	Outer_ Full
		517002 to 522996	517002 to 522996	Middle	80MHz	Pi/2BPSK,QPSK,16QAM, 64QAM, 256QAM	Outer_ Full
		518004 to 522000	518004 to 522000	Middle	90MHz	Pi/2BPSK,QPSK,16QAM, 64QAM, 256QAM	Outer_ Full
		519000 to 520998	519000 to 520998	Middle	100MHz	Pi/2BPSK,QPSK,16QAM, 64QAM, 256QAM	Outer_ Full
A	BAND EDGE	510000 to 529998	510000 to 529998	Low	10MHz	QPSK	1RB/ 0RB Offset
							Outer_ Full
				High	10MHz	QPSK	1RB/ 50RB Offset
							Outer_ Full
		515004 to 525000	515004 to 525000	Low	60MHz	QPSK	1RB/ 0RB Offset
							Outer_ Full

				High	60MHz	QPSK	1RB/ 161RB Offset
							Outer_ Full
		519000 to 520998	519000 to 520998	Low	100MHz	QPSK	1RB/ 0RB Offset
							Outer_ Full
				High	100MHz	QPSK	1RB/ 272RB Offset
							Outer_ Full
A	CONDUCTED EMISSION	510000 to 529998	510000 to 529998	Low, Middle, High	10MHz	QPSK	1RB/ 0RB Offset
		515004 to 525000	515004 to 525000	Low, Middle, High	60MHz	QPSK	1RB/ 0RB Offset
		519000 to 520998	519000 to 520998	Low, Middle, High	100MHz	QPSK	1RB/ 0RB Offset
A	RADIATED EMISSION	510000 to 529998	510000 to 529998	Middle	10MHz	QPSK	1RB/ 0RB Offset
		510498 to 529500	510498 to 529500	Middle	15MHz	QPSK	1RB/ 0RB Offset
		510996 to 528996	510996 to 528996	Middle	20MHz	QPSK	1RB/ 0RB Offset
		513000 to 526998	513000 to 526998	Middle	40MHz	QPSK	1RB/ 0RB Offset
		514002 to 525996	514002 to 525996	Middle	50MHz	QPSK	1RB/ 0RB Offset
		515004 to 525000	515004 to 525000	Middle	60MHz	QPSK	1RB/ 0RB Offset
		516000 to 523998	516000 to 523998	Middle	70MHz	QPSK	1RB/ 0RB Offset
		517002 to 522996	517002 to 522996	Middle	80MHz	QPSK	1RB/ 0RB Offset
		518004 to 522000	518004 to 522000	Middle	90MHz	QPSK	1RB/ 0RB Offset
		519000 to 520998	519000 to 520998	Low, Middle, High	100MHz	QPSK	1RB/ 0RB Offset

Note: 1. This device was tested under all bandwidths, RB configurations and modulations. The worst case was found in QPSK modulation.

2. The test data presented in the report from worst SA _n41.

5G NR n77(Part27Q) MODE (SA_n77/ DC_41A_n77)/MIMO Mode

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CP-OFDM CHANNEL	AVAILABLE DFT-S-OFDM CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE(DFT-S-OFDM) (INCLUDE CP-OFDM)
A	EIRP	630334 to 636332	647334 to 664666	Low, Middle, High	10MHz	QPSK	1RB/ 0RB Offset
		630668 to 636000	630668 to 636000	Low, Middle, High	20MHz	QPSK	1RB/ 0RB Offset
		631002 to 635666	631002 to 635666	Low, Middle, High	30MHz	QPSK	1RB/ 0RB Offset
		631334 to 635332	631334 to 635332	Low, Middle, High	40MHz	QPSK	1RB/ 0RB Offset
		631668 to 635000	631668 to 635000	Low, Middle, High	50MHz	QPSK	1RB/ 0RB Offset
		632000 to 634666	632000 to 634666	Low, Middle, High	60MHz	QPSK	1RB/ 0RB Offset
		632334 to 634332	632334 to 634332	Low, Middle, High	70MHz	QPSK	1RB/ 0RB Offset
		632668 to 634000	632668 to 634000	Low, Middle, High	80MHz	QPSK	1RB/ 0RB Offset
		633000 to 633666	633000 to 633666	Low, Middle, High	90MHz	QPSK	1RB/ 0RB Offset
		633334	633334	Low, Middle, High	100MHz	Pi/2BPSK,QPSK,16QAM, 64QAM, 256QAM	1RB/ 0RB Offset
A	FREQUENCY STABILITY	630668 to 636000	630668 to 636000	Middle	20MHz	QPSK	Outer_ Full
A	PEAK TO AVERAGE RATIO	630668 to 636000	630668 to 636000	Low, Middle, High	20MHz	QPSK	Outer_ Full
A	OCCUPIED BANDWIDTH	630334 to 636332	647334 to 664666	Middle	10MHz	Pi/2BPSK,QPSK,16QAM, 64QAM, 256QAM	Outer_ Full
		630668 to 636000	630668 to 636000	Middle	20MHz	Pi/2BPSK,QPSK,16QAM, 64QAM, 256QAM	Outer_ Full
		631002 to 635666	631002 to 635666	Middle	30MHz	Pi/2BPSK,QPSK,16QAM, 64QAM, 256QAM	Outer_ Full
		631334 to 635332	631334 to 635332	Middle	40MHz	Pi/2BPSK,QPSK,16QAM, 64QAM, 256QAM	Outer_ Full
		631668 to 635000	631668 to 635000	Middle	50MHz	Pi/2BPSK,QPSK,16QAM, 64QAM, 256QAM	Outer_ Full
		632000 to 634666	632000 to 634666	Middle	60MHz	Pi/2BPSK,QPSK,16QAM, 64QAM, 256QAM	Outer_ Full
		632334 to 634332	632334 to 634332	Middle	70MHz	Pi/2BPSK,QPSK,16QAM, 64QAM, 256QAM	Outer_ Full
		632668 to 634000	632668 to 634000	Middle	80MHz	Pi/2BPSK,QPSK,16QAM, 64QAM, 256QAM	Outer_ Full
		633000 to 633666	633000 to 633666	Middle	90MHz	Pi/2BPSK,QPSK,16QAM, 64QAM, 256QAM	Outer_ Full
		633334	633334	Middle	100MHz	Pi/2BPSK,QPSK,16QAM, 64QAM, 256QAM	Outer_ Full
A	BAND EDGE	630334 to 636332	647334 to 664666	Low	10MHz	QPSK	1RB/ 0RB Offset
							Outer_ Full
				High	10MHz	QPSK	1RB/ 50RB Offset
							Outer_ Full

		632000 to 634666	632000 to 634666	Low	60MHz	QPSK	1RB/ 0RB Offset
							Outer_ Full
				High	60MHz	QPSK	1RB/ 161RB Offset
							Outer_ Full
		633334	633334	Low	100MHz	QPSK	1RB/ 0RB Offset
							Outer_ Full
				High	100MHz	QPSK	1RB/ 272RB Offset
							Outer_ Full
A	CONDUCTED EMISSION	630334 to 636332	647334 to 664666	Low, Middle, High	20MHz	QPSK	1RB/ 0RB Offset
		632000 to 634666	632000 to 634666	Low, Middle, High	60MHz	QPSK	1RB/ 0RB Offset
		633334	633334	Low, Middle, High	100MHz	QPSK	1RB/ 0RB Offset
A	RADIATED EMISSION	630334 to 636332	647334 to 664666	Middle	10MHz	QPSK	1RB/ 0RB Offset
		630668 to 636000	630668 to 636000	Middle	20MHz	QPSK	1RB/ 0RB Offset
		631002 to 635666	631002 to 635666	Middle	30MHz	QPSK	1RB/ 0RB Offset
		631334 to 635332	631334 to 635332	Middle	40MHz	QPSK	1RB/ 0RB Offset
		631668 to 635000	631668 to 635000	Middle	50MHz	QPSK	1RB/ 0RB Offset
		632000 to 634666	632000 to 634666	Low, Middle, High	60MHz	QPSK	1RB/ 0RB Offset
		632334 to 634332	632334 to 634332	Middle	70MHz	QPSK	1RB/ 0RB Offset
		632668 to 634000	632668 to 634000	Middle	80MHz	QPSK	1RB/ 0RB Offset
		633000 to 633666	633000 to 633666	Middle	90MHz	QPSK	1RB/ 0RB Offset
		633334	633334	Middle	100MHz	QPSK	1RB/ 0RB Offset

Note: 1.This device was tested under all bandwidths, RB configurations and modulations. The worst case was found in QPSK modulation.

2. The EIRP calculate presented in the report from worst SA n77(Part27Q).

3.For UL_mimo tests, Only supported CP modulation, and 10*Log (2)dBm has been added to the test plot.

5G NR n77(Part27O) MODE (SA_n77/ DC_41A_n77) /MIMO Mode

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CP-OFDM CHANNEL	AVAILABLE DFT-S-OFDM CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE(DFT-S-OFDM) (INCLUDE CP-OFDM)
A	EIRP	647000 to 665000	647000 to 665000	Low, Middle, High	10MHz	QPSK	1RB/ 0RB Offset
		647334 to 664666	647334 to 664666	Low, Middle, High	20MHz	QPSK	1RB/ 0RB Offset
		647668 to 664332	647668 to 664332	Low, Middle, High	30MHz	QPSK	1RB/ 0RB Offset
		648000 to 664000	648000 to 664000	Low, Middle, High	40MHz	QPSK	1RB/ 0RB Offset
		648334 to 663666	648334 to 663666	Low, Middle, High	50MHz	QPSK	1RB/ 0RB Offset
		648668 to 663332	648668 to 663332	Low, Middle, High	60MHz	QPSK	1RB/ 0RB Offset
		649000 to 663000	649000 to 663000	Low, Middle, High	70MHz	QPSK	1RB/ 0RB Offset
		649334 to 662666	649334 to 662666	Low, Middle, High	80MHz	QPSK	1RB/ 0RB Offset
		649668 to 662332	649668 to 662332	Low, Middle, High	90MHz	QPSK	1RB/ 0RB Offset
		650000 to 662000	650000 to 662000	Low, Middle, High	100MHz	Pi/2BPSK,QPSK,16QAM, 64QAM, 256QAM	1RB/ 0RB Offset
A	FREQUENCY STABILITY	647334 to 664666	647334 to 664666	Middle	20MHz	QPSK	Outer_ Full
A	PEAK TO AVERAGE RATIO	650000 to 662000	650000 to 662000	Low, Middle, High	20MHz	QPSK	Outer_ Full
A	OCCUPIED BANDWIDTH	647000 to 665000	647000 to 665000	Middle	10MHz	Pi/2BPSK,QPSK,16QAM, 64QAM, 256QAM	Outer_ Full
		647334 to 664666	647334 to 664666	Middle	20MHz	Pi/2BPSK,QPSK,16QAM, 64QAM, 256QAM	Outer_ Full
		647668 to 664332	647668 to 664332	Middle	30MHz	Pi/2BPSK,QPSK,16QAM, 64QAM, 256QAM	Outer_ Full
		648000 to 664000	648000 to 664000	Middle	40MHz	Pi/2BPSK,QPSK,16QAM, 64QAM, 256QAM	Outer_ Full
		648334 to 663666	648334 to 663666	Middle	50MHz	Pi/2BPSK,QPSK,16QAM, 64QAM, 256QAM	Outer_ Full
		648668 to 663332	648668 to 663332	Middle	60MHz	Pi/2BPSK,QPSK,16QAM, 64QAM, 256QAM	Outer_ Full
		649000 to 663000	649000 to 663000	Middle	70MHz	Pi/2BPSK,QPSK,16QAM, 64QAM, 256QAM	Outer_ Full
		649334 to 662666	649334 to 662666	Middle	80MHz	Pi/2BPSK,QPSK,16QAM, 64QAM, 256QAM	Outer_ Full
		649668 to 662332	649668 to 662332	Middle	90MHz	Pi/2BPSK,QPSK,16QAM, 64QAM, 256QAM	Outer_ Full
		650000 to 662000	650000 to 662000	Low, Middle, High	100MHz	Pi/2BPSK,QPSK,16QAM, 64QAM, 256QAM	Outer_ Full
A	BAND EDGE	647000 to 665000	647000 to 665000	Low	10MHz	QPSK	1RB/ 0RB Offset
							Outer_ Full
				High	10MHz	QPSK	1RB/ 50RB Offset

							Outer_ Full
		648668 to 663332	648668 to 663332	Low	60MHz	QPSK	1RB/ 0RB Offset
							Outer_ Full
				High	60MHz	QPSK	1RB/ 161RB Offset
							Outer_ Full
		650000 to 662000	650000 to 662000	Low	100MHz	QPSK	1RB/ 0RB Offset
							Outer_ Full
				High	100MHz	QPSK	1RB/ 272RB Offset
							Outer_ Full
A	CONDUCTED EMISSION	647334 to 664666	647334 to 664666	Low, Middle, High	20MHz	QPSK	1RB/ 0RB Offset
		648668 to 663332	648668 to 663332	Low, Middle, High	60MHz	QPSK	1RB/ 0RB Offset
		650000 to 662000	650000 to 662000	Low, Middle, High	100MHz	QPSK	1RB/ 0RB Offset
A	RADIATED EMISSION	647000 to 665000	647000 to 665000	Middle	10MHz	QPSK	1RB/ 0RB Offset
		647334 to 664666	647334 to 664666	Middle	20MHz	QPSK	1RB/ 0RB Offset
		647668 to 664332	647668 to 664332	Middle	30MHz	QPSK	1RB/ 0RB Offset
		648000 to 664000	648000 to 664000	Middle	40MHz	QPSK	1RB/ 0RB Offset
		648334 to 663666	648334 to 663666	Middle	50MHz	QPSK	1RB/ 0RB Offset
		648668 to 663332	648668 to 663332	Low, Middle, High	60MHz	QPSK	1RB/ 0RB Offset
		649000 to 663000	649000 to 663000	Middle	70MHz	QPSK	1RB/ 0RB Offset
		649334 to 662666	649334 to 662666	Middle	80MHz	QPSK	1RB/ 0RB Offset
		649668 to 662332	649668 to 662332	Middle	90MHz	QPSK	1RB/ 0RB Offset
		650000 to 662000	650000 to 662000	Middle	100MHz	QPSK	1RB/ 0RB Offset

Note: 1.This device was tested under all bandwidths, RB configurations and modulations. The worst case was found in QPSK modulation.

2. The test data presented in the report from worst SA_n77(Part 27O).

3.For UL_mimo tests, Only supported CP modulation, and 10*Log (2)dBm has been added to the test plot.

5G NR Band n78(Part27Q) (SA_n78)

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CP-OFDM CHANNEL	AVAILABLE DFT-S-OFDM CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE(DFT-S-OFDM) (INCLUDE CP-OFDM)
A	EIRP	630334 to 636332	630334 to 636332	Low, Middle, High	10MHz	QPSK	1RB/ 0RB Offset
		630668 to 636000	630668 to 636000	Low, Middle, High	20MHz	QPSK	1RB/ 0RB Offset
		631000 to 635666	631000 to 635666	Low, Middle, High	30MHz	QPSK	1RB/ 0RB Offset
		631334 to 635332	631334 to 635332	Low, Middle, High	40MHz	QPSK	1RB/ 0RB Offset
		631668 to 635000	631668 to 635000	Low, Middle, High	50MHz	QPSK	1RB/ 0RB Offset
		632000 to 634666	632000 to 634666	Low, Middle, High	60MHz	QPSK	1RB/ 0RB Offset
		632334 to 634332	632334 to 634332	Low, Middle, High	70MHz	QPSK	1RB/ 0RB Offset
		632668 to 634000	632668 to 634000	Low, Middle, High	80MHz	QPSK	1RB/ 0RB Offset
		633000 to 633666	633000 to 633666	Low, Middle, High	90MHz	QPSK	1RB/ 0RB Offset
		633334	633334	Middle,	100MHz	Pi/2BPSK,QPSK,16QAM, 64QAM, 256QAM	1RB/ 0RB Offset

Note: 1. This device was tested under all bandwidths, RB configurations and modulations. The worst case was found in QPSK modulation.

2. The other conducted test data Please refer to SA 77(Part27Q) normal mode, Because it is a functionality of SA n77(Part27Q) with the same output power and supported bandwidths.

TEST CONDITION:

TEST ITEM	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
ERP	23deg. C, 70%RH	DC 5V By Adapter	Jace Hu
FREQUENCY STABILITY	23deg. C, 70%RH	DC3.6 V/3.85V/4.3V By DC Supply	James Fu
OCCUPIED BANDWIDTH	23deg. C, 70%RH	DC5V By Adapter	James Fu
BAND EDGE	23deg. C, 70%RH	DC 5V By Adapter	James Fu
CONDUCTED EMISSION	23deg. C, 70%RH	DC5V By Adapter	James Fu
RADIATED EMISSION	23deg. C, 70%RH	DC5V By Adapter	Jace Hu
PEAK TO AVERAGE RATIO	23deg. C, 70%RH	DC5V By Adapter	James Fu

2.5 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a RF product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC 47 CFR Part 2

FCC 47 CFR Part 22/24/27

KDB 971168 D01 Power Meas License Digital Systems v03r01

ANSI/TIA/EIA-603-D

ANSI/TIA/EIA-603-E

ANSI C63.26-2015

NOTE: All test items have been performed and recorded as per the above standards.

3 TEST TYPES AND RESULTS

3.1 OUTPUT POWER MEASUREMENT

3.1.1 LIMITS OF OUTPUT POWER MEASUREMENT

The radiated peak output power shall be according to the specific rule Part 27.50(h)(2) that “User stations are limited to 2 watts” and 27.50(i) specific that “Peak transmit power must be measure over any interval of continuous transmission using instrumentation calibration in terms of rms-equivalent voltage.(n41)”

According to the specific rule Part 27.50(j)(4) and Part 27.50(k)(3) ,Mobile and portable stations are limited to 1 Watt EIRP. Mobile and portable stations operating in these bands must employ a means for limiting power to the minimum necessary for successful communications.(n77/n78)

3.1.2 TEST PROCEDURES

EIRP / ERP MEASUREMENT:

Per KDB 971168 D01 Power Meas License Digital Systems v03r01 or subclause 5.2.5.5 of ANSI C63.26-2015, the relevant equation for determing the ERP or EIRP from the conducted RF output power measured using the guidance provided above is:

ERP or EIRP = $P_{Meas} + G_T - L_C$

Where:

ERP or EIRP = effective radiated power or equivalent isotropically radiated power, respectively (expressed in the same units as P_{Meas}, typically dBW or dBm);

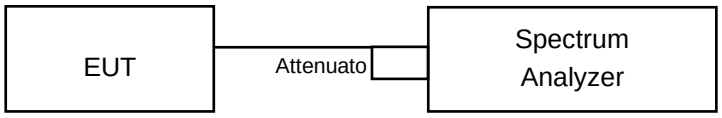
P_{Meas} = measured transmitter output power or PSD, in dBm or dBW;

G_T = gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP);

L_C = signal attenuation in the connecting cable between the transmitter and antenna, in dB.

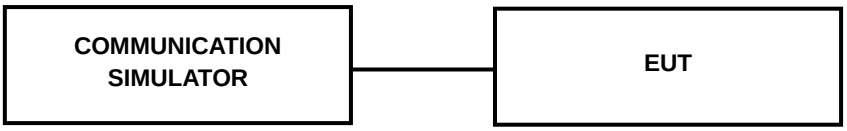
CONDUCTED POWER MEASUREMENT:

a. The EUT was set up for the maximum power with LTE link data modulation and link up with simulator.
b. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.



3.1.3 TEST SETUP

CONDUCTED POWER MEASUREMENT:



1. Connect the DUT transmitter output to the spectrum analyzer via coaxial cable while ensuring proper impedance matching.
2. Time the analyzer to the nominal center frequency of the emission bandwidth (EBW).
3. Set the span to twice the nominal EBW (span = 2 x EBW).
4. Set the resolution bandwidth (RBW) to approximately 1% of EBW.
5. Set the video bandwidth (VBW) to ≧ 3 x RBW
6. Select the average power (RMS) display detector.
7. Set the number of measurement points to ≧1001.
8. Use auto-coupled sweep time.
9. Perform measurement over an interval of time when the transmission is continuous and at its maximum power level.
10. Utilize trace averaging over 100 traces in the power averaging mode.
11. Use the Band/Channel Power function to determine the integrated power over the full EBW.
12. Record the band power level.
13. Adjust the recorded level by applying appropriate correction factors for the measurement set-up.
14. Determine the EIRP by adding the effective antenna gain to the adjusted power level.

For the actual test configuration, please refer to the attached file (Test Setup Photo).

3.1.4 TEST RESULTS

CONDUCTED OUTPUT POWER (dBm)

5G SA

n41 (Ant W2)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		519000	520002	520998
		Frequence (MHz)		2595	2600.01	2604.99
100M	DFT-s-OFDM Pi/2 BPSK	1	1	23.43	23.38	23.50
		1	137	23.33	23.19	23.30
		1	271	23.28	23.37	23.33
		135	0	22.87	22.74	22.94
		135	69	23.19	23.36	23.31
		135	138	22.91	22.72	22.94
		270	0	22.68	22.74	22.93
	DFT-s-OFDM QPSK	1	1	23.47	23.43	23.54
		1	137	23.08	23.24	23.27
		1	271	23.02	23.12	23.21
		135	0	22.42	22.48	22.42
		135	69	23.35	23.32	23.40
		135	138	22.13	22.28	22.37
		270	0	22.32	22.30	22.40
	DFT-s-OFDM 16QAM	1	1	21.72	21.78	21.99
	DFT-s-OFDM 64QAM	1	1	20.68	20.76	20.90
	DFT-s-OFDM 256QAM	1	1	18.38	18.34	18.58

BW	MCS Index	Channel		518004	520002	522000
		Frequence (MHz)		2590.02	2600.01	2610
90M	DFT-s-OFDM QPSK	1	1	23.39	23.25	23.42
BW	MCS Index	Channel		517002	520002	522996
		Frequence (MHz)		2585.01	2600.01	2614.98
80M	DFT-s-OFDM QPSK	1	1	23.20	23.40	23.34
BW	MCS Index	Channel		516000	520002	523998
		Frequence (MHz)		2580	2600.01	2619.99
70M	DFT-s-OFDM QPSK	1	1	23.33	23.30	23.31
BW	MCS Index	Channel		515004	520002	525000
		Frequence (MHz)		2575.02	2600.01	2625
60M	DFT-s-OFDM QPSK	1	1	23.49	23.47	23.47
BW	MCS Index	Channel		514002	520002	525996
		Frequence (MHz)		2570.01	2600.01	2629.98
50M	DFT-s-OFDM QPSK	1	1	23.36	23.34	23.26
BW	MCS Index	Channel		513000	520002	526998
		Frequence (MHz)		2565	2600.01	2634.99
40M	DFT-s-OFDM QPSK	1	1	23.48	23.38	23.48
BW	MCS Index	Channel		510996	520002	528996
		Frequence (MHz)		2554.98	2600.01	2644.98
20M	DFT-s-OFDM QPSK	1	1	23.27	23.23	23.36
BW	MCS Index	Channel		510498	520002	529500
		Frequence (MHz)		2552.49	2600.01	2647.5
15M	DFT-s-OFDM QPSK	1	1	23.45	23.40	23.52
BW	MCS Index	Channel		510000	520002	529998
		Frequence (MHz)		2550	2600.01	2649.99
10M	DFT-s-OFDM QPSK	1	1	23.38	23.33	23.42

n77 （3450MHz-3550MHz）(Ant W2)						
BW	MCS Index	RB Size	RB Offset	/	Mid	/
		Channel		/	633334	/
		Frequence (MHz)		/	3500.01	/
100M	DFT-s-OFDM Pi/2 BPSK	1	1	/	23.50	/
		1	137	/	23.41	/
		1	271	/	23.24	/
		135	0	/	23.08	/
		135	69	/	23.44	/
		135	138	/	22.99	/
		270	0	/	22.98	/
	DFT-s-OFDM QPSK	1	1	/	23.52	/
		1	137	/	23.50	/
		1	271	/	23.41	/
		135	0	/	22.55	/
		135	69	/	23.50	/
		135	138	/	22.39	/
		270	0	/	22.47	/
	DFT-s-OFDM 16QAM	1	1	/	22.84	/
	DFT-s-OFDM 64QAM	1	1	/	21.10	/
	DFT-s-OFDM 256QAM	1	1	/	18.70	/

BW	MCS Index	Channel		633000	633334	633666
		Frequence (MHz)		3495	3500.01	3504.99
90M	DFT-s-OFDM QPSK	1	1	23.43	23.46	23.36
BW	MCS Index	Channel		632668	633334	634000
		Frequence (MHz)		3490.02	3500.01	3510
80M	DFT-s-OFDM QPSK	1	1	23.33	23.33	23.13
BW	MCS Index	Channel		632334	633334	634332
		Frequence (MHz)		3485.01	3500.01	3514.98
70M	DFT-s-OFDM QPSK	1	1	23.21	23.48	23.32
BW	MCS Index	Channel		632000	633334	634666
		Frequence (MHz)		3480	3500.01	3519.99
60M	DFT-s-OFDM QPSK	1	1	23.44	23.27	23.43
BW	MCS Index	Channel		631668	633334	635000
		Frequence (MHz)		3475.02	3500.01	3525
50M	DFT-s-OFDM QPSK	1	1	23.46	23.50	23.23
BW	MCS Index	Channel		631334	633334	635332
		Frequence (MHz)		3470.01	3500.01	3529.98
40M	DFT-s-OFDM QPSK	1	1	23.50	23.40	23.24
BW	MCS Index	Channel		631000	633334	635666
		Frequence (MHz)		3465	3500.01	3534.99
30M	DFT-s-OFDM QPSK	1	1	23.40	23.33	23.09
BW	MCS Index	Channel		630668	633334	636000
		Frequence (MHz)		3460.02	3500.01	3540
20M	DFT-s-OFDM QPSK	1	1	23.42	23.30	23.11
BW	MCS Index	Channel		630334	633334	636332
		Frequence (MHz)		3455.01	3500.01	3544.98
10M	DFT-s-OFDM QPSK	1	1	23.43	23.33	23.10

n77 (3700MHz-3980MHz)(Ant W2)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		650000	656000	662000
		Frequence (MHz)		3750	3840	3930
100M	DFT-s-OFDM Pi/2 BPSK	1	1	23.00	23.08	22.95
		1	137	22.82	23.01	22.91
		1	271	22.95	23.07	22.94
		135	0	22.57	22.59	22.67
		135	69	22.89	23.06	22.85
		135	138	22.60	22.55	22.57
		270	0	22.43	22.63	22.68
	DFT-s-OFDM QPSK	1	1	**23.01**	**23.16**	**22.98**
		1	137	22.99	22.95	22.90
		1	271	22.98	22.91	22.96
		135	0	22.17	22.16	22.08
		135	69	**22.93**	**23.09**	**22.90**
		135	138	22.04	22.03	21.86
		270	0	22.09	**22.12**	22.07
	DFT-s-OFDM 16QAM	1	1	21.86	22.10	21.95
	DFT-s-OFDM 64QAM	1	1	20.54	20.68	20.76
	DFT-s-OFDM 256QAM	1	1	18.36	18.50	18.30

BW	MCS Index	Channel		649668	656000	662332
		Frequence (MHz)		3745.02	3840	3934.98
90M	DFT-s-OFDM QPSK	1	1	23.08	23.12	22.81
BW	MCS Index	Channel		649334	656000	662666
		Frequence (MHz)		3740.01	3840	3939.99
80M	DFT-s-OFDM QPSK	1	1	22.89	23.15	22.85
BW	MCS Index	Channel		649000	656000	663000
		Frequence (MHz)		3735	3840	3945
70M	DFT-s-OFDM QPSK	1	1	23.04	23.07	22.89
BW	MCS Index	Channel		648668	656000	663332
		Frequence (MHz)		3730.02	3840	3949.98
60M	DFT-s-OFDM QPSK	1	1	22.82	22.95	22.92
BW	MCS Index	Channel		648334	656000	663666
		Frequence (MHz)		3725.01	3840	3954.99
50M	DFT-s-OFDM QPSK	1	1	22.76	22.94	22.80
BW	MCS Index	Channel		648000	656000	664000
		Frequence (MHz)		3720	3840	3960
40M	DFT-s-OFDM QPSK	1	1	23.09	23.00	22.81
BW	MCS Index	Channel		647668	656000	664332
		Frequence (MHz)		3715.02	3840	3964.98
30M	DFT-s-OFDM QPSK	1	1	23.03	23.00	22.94
BW	MCS Index	Channel		647334	656000	664666
		Frequence (MHz)		3710.01	3840	3969.99
20M	DFT-s-OFDM QPSK	1	1	22.80	23.11	22.95
BW	MCS Index	Channel		647000	656000	665000
		Frequence (MHz)		3705	3840	3975
10M	DFT-s-OFDM QPSK	1	1	22.83	23.04	23.06

EN-DC_n77 (SCS 30 kHz)_3450MHz-3550MHz_(Ant W4)						
BW	MCS Index	RB Size	RB Offset	/	Mid	/
		Channel		/	633334	/
		Frequence (MHz)		/	3500.01	/
100M	DFT-s-OFDM Pi/2 BPSK	1	1	/	22.77	/
		1	137	/	22.79	/
		1	271	/	22.74	/
		135	0	/	22.45	/
		135	69	/	22.77	/
		135	138	/	22.28	/
		270	0	/	22.38	/
	DFT-s-OFDM QPSK	1	1	/	22.88	/
		1	137	/	22.80	/
		1	271	/	22.79	/
		135	0	/	21.84	/
		135	69	/	22.84	/
		135	138	/	21.84	/
		270	0	/	21.83	/
	DFT-s-OFDM 16QAM	1	1	/	21.71	/
	DFT-s-OFDM 64QAM	1	1	/	20.23	/
	DFT-s-OFDM 256QAM	1	1	/	18.14	/

BW	MCS Index	Channel		633000	633334	633666
		Frequence (MHz)		3495	3500.01	3504.99
90M	DFT-s-OFDM QPSK	1	1	22.70	22.58	22.83
BW	MCS Index	Channel		632668	633334	634000
		Frequence (MHz)		3490.02	3500.01	3510
80M	DFT-s-OFDM QPSK	1	1	22.84	22.86	22.62
BW	MCS Index	Channel		632334	633334	634332
		Frequence (MHz)		3485.01	3500.01	3514.98
70M	DFT-s-OFDM QPSK	1	1	22.85	22.79	22.66
BW	MCS Index	Channel		632000	633334	634666
		Frequence (MHz)		3480	3500.01	3519.99
60M	DFT-s-OFDM QPSK	1	1	22.84	22.67	22.59
BW	MCS Index	Channel		631668	633334	635000
		Frequence (MHz)		3475.02	3500.01	3525
50M	DFT-s-OFDM QPSK	1	1	22.69	22.80	22.53
BW	MCS Index	Channel		631334	633334	635332
		Frequence (MHz)		3470.01	3500.01	3529.98
40M	DFT-s-OFDM QPSK	1	1	22.85	22.69	22.56
BW	MCS Index	Channel		631000	633334	635666
		Frequence (MHz)		3465	3500.01	3534.99
30M	DFT-s-OFDM QPSK	1	1	22.61	22.61	22.61
BW	MCS Index	Channel		630668	633334	636000
		Frequence (MHz)		3460.02	3500.01	3540
20M	DFT-s-OFDM QPSK	1	1	22.60	22.76	22.82
BW	MCS Index	Channel		630334	633334	636332
		Frequence (MHz)		3455.01	3500.01	3544.98
10M	DFT-s-OFDM QPSK	1	1	22.55	22.63	22.83

EN-DC_n77 (SCS 30 kHz)_3700MHz-3980MHz_(Ant W4)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		650000	656000	662000
		Frequence (MHz)		3750	3840	3930
100M	DFT-s-OFDM Pi/2 BPSK	1	1	22.83	22.90	22.80
		1	137	22.81	22.88	22.71
		1	271	22.80	22.87	22.69
		135	0	22.57	22.51	22.45
		135	69	22.76	22.91	22.89
		135	138	22.51	22.45	22.48
		270	0	22.34	22.46	22.37
	DFT-s-OFDM QPSK	1	1	**22.85**	**22.99**	**22.89**
		1	137	22.82	22.97	22.83
		1	271	22.79	22.95	22.88
		135	0	21.91	21.98	21.96
		135	69	**22.83**	**22.93**	**22.85**
		135	138	21.88	21.96	21.90
		270	0	21.80	**21.92**	21.83
	DFT-s-OFDM 16QAM	1	1	21.56	21.58	21.54
	DFT-s-OFDM 64QAM	1	1	20.20	20.33	20.31
	DFT-s-OFDM 256QAM	1	1	18.06	18.11	18.02

BW	MCS Index	Channel		649668	656000	662332
		Frequence (MHz)		3745.02	3840	3934.98
90M	DFT-s-OFDM QPSK	1	1	22.84	22.79	22.89
BW	MCS Index	Channel		649334	656000	662666
		Frequence (MHz)		3740.01	3840	3939.99
80M	DFT-s-OFDM QPSK	1	1	22.87	22.77	22.91
BW	MCS Index	Channel		649000	656000	663000
		Frequence (MHz)		3735	3840	3945
70M	DFT-s-OFDM QPSK	1	1	22.87	22.94	22.70
BW	MCS Index	Channel		648668	656000	663332
		Frequence (MHz)		3730.02	3840	3949.98
60M	DFT-s-OFDM QPSK	1	1	22.62	22.90	22.85
BW	MCS Index	Channel		648334	656000	663666
		Frequence (MHz)		3725.01	3840	3954.99
50M	DFT-s-OFDM QPSK	1	1	22.74	22.88	22.65
BW	MCS Index	Channel		648000	656000	664000
		Frequence (MHz)		3720	3840	3960
40M	DFT-s-OFDM QPSK	1	1	22.67	22.75	22.93
BW	MCS Index	Channel		647668	656000	664332
		Frequence (MHz)		3715.02	3840	3964.98
30M	DFT-s-OFDM QPSK	1	1	22.79	22.71	22.78
BW	MCS Index	Channel		647334	656000	664666
		Frequence (MHz)		3710.01	3840	3969.99
20M	DFT-s-OFDM QPSK	1	1	22.82	22.84	22.71
BW	MCS Index	Channel		647000	656000	665000
		Frequence (MHz)		3705	3840	3975
10M	DFT-s-OFDM QPSK	1	1	22.83	22.98	22.97

n77_3450MHz-3550MHz_(UL MIMO)(Ant W2+W4)						
BW	**MCS Index**	**RB Size**	**RB Offset**	**/**	**Mid**	**/**
		Channel		**/**	**633334**	**/**
		Frequence (MHz)		**/**	**3500.01**	**/**
100M	CP-OFDM Pi/2 BPSK	NA	NA	/	/	/
		NA	NA	/	/	/
		NA	NA	/	/	/
		NA	NA	/	/	/
		NA	NA	/	/	/
		NA	NA	/	/	/
		NA	NA	/	/	/
	CP-OFDM QPSK	1	1	/	**22.98**	/
		1	137	/	22.83	/
		1	271	/	22.87	/
		137	0	/	20.96	/
		137	68	/	**22.84**	/
		137	136	/	20.82	/
		273	0	/	**20.85**	/
	CP-OFDM 16QAM	1	1	/	21.97	/
	CP-OFDM 64QAM	1	1	/	20.38	/
	CP-OFDM 256QAM	1	1	/	17.41	/

BW	MCS Index	Channel		633000	633334	633666
		Frequence (MHz)		3495	3500.01	3504.99
90M	CP-OFDM QPSK	1	1	22.88	22.92	22.84
BW	MCS Index	Channel		632668	633334	634000
		Frequence (MHz)		3490.02	3500.01	3510
80M	CP-OFDM QPSK	1	1	22.92	22.89	22.82
BW	MCS Index	Channel		632334	633334	634332
		Frequence (MHz)		3485.01	3500.01	3514.98
70M	CP-OFDM QPSK	1	1	22.85	22.87	22.93
BW	MCS Index	Channel		632000	633334	634666
		Frequence (MHz)		3480	3500.01	3519.99
60M	CP-OFDM QPSK	1	1	22.81	22.94	22.87
BW	MCS Index	Channel		631668	633334	635000
		Frequence (MHz)		3475.02	3500.01	3525
50M	CP-OFDM QPSK	1	1	22.94	22.92	22.91
BW	MCS Index	Channel		631334	633334	635332
		Frequence (MHz)		3470.01	3500.01	3529.98
40M	CP-OFDM QPSK	1	1	22.89	22.87	22.85
BW	MCS Index	Channel		631000	633334	635666
		Frequence (MHz)		3465	3500.01	3534.99
30M	CP-OFDM QPSK	1	1	22.83	22.91	22.87
BW	MCS Index	Channel		630668	633334	636000
		Frequence (MHz)		3460.02	3500.01	3540
20M	CP-OFDM QPSK	1	1	22.82	22.84	22.92
BW	MCS Index	Channel		630334	633334	636332
		Frequence (MHz)		3455.01	3500.01	3544.98
10M	CP-OFDM QPSK	1	1	22.91	22.85	22.88

n77_3700MHz-3980MHz_(UL MIMO)(Ant W2+W4)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		650000	656000	662000
		Frequence (MHz)		3750	3840	3930
100M	CP-OFDM Pi/2 BPSK	NA	NA	/	/	/
		NA	NA	/	/	/
		NA	NA	/	/	/
		NA	NA	/	/	/
		NA	NA	/	/	/
		NA	NA	/	/	/
		NA	NA	/	/	/
	CP-OFDM QPSK	1	1	22.87	22.96	22.89
		1	137	22.86	22.82	22.84
		1	271	22.81	22.88	22.83
		137	0	20.91	20.83	20.82
		137	68	22.81	22.86	22.85
		137	136	20.90	20.86	20.88
		273	0	20.85	20.99	20.87
	CP-OFDM 16QAM	1	1	21.99	21.85	21.91
	CP-OFDM 64QAM	1	1	20.24	20.08	20.10
	CP-OFDM 256QAM	1	1	17.32	17.30	17.26

BW	MCS Index	Channel		649668	656000	662332
		Frequence (MHz)		3745.02	3840	3934.98
90M	CP-OFDM QPSK	1	1	22.85	22.89	22.87
BW	MCS Index	Channel		649334	656000	662666
		Frequence (MHz)		3740.01	3840	3939.99
80M	CP-OFDM QPSK	1	1	22.81	22.94	22.83
BW	MCS Index	Channel		649000	656000	663000
		Frequence (MHz)		3735	3840	3945
70M	CP-OFDM QPSK	1	1	22.86	22.88	22.84
BW	MCS Index	Channel		648668	656000	663332
		Frequence (MHz)		3730.02	3840	3949.98
60M	CP-OFDM QPSK	1	1	22.81	22.85	22.81
BW	MCS Index	Channel		648334	656000	663666
		Frequence (MHz)		3725.01	3840	3954.99
50M	CP-OFDM QPSK	1	1	22.85	22.93	22.88
BW	MCS Index	Channel		648000	656000	664000
		Frequence (MHz)		3720	3840	3960
40M	CP-OFDM QPSK	1	1	22.83	22.91	22.86
BW	MCS Index	Channel		647668	656000	664332
		Frequence (MHz)		3715.02	3840	3964.98
30M	CP-OFDM QPSK	1	1	22.84	22.87	22.83
BW	MCS Index	Channel		647334	656000	664666
		Frequence (MHz)		3710.01	3840	3969.99
20M	CP-OFDM QPSK	1	1	22.81	22.81	22.85
BW	MCS Index	Channel		647000	656000	665000
		Frequence (MHz)		3705	3840	3975
10M	CP-OFDM QPSK	1	1	22.85	22.89	22.86

n78_3450MHz-3550MHz_(Ant W2)						
BW	MCS Index	RB Size	RB Offset	/	Mid	/
		Channel		/	633334	/
		Frequence (MHz)		/	3500.01	/
100M	DFT-s-OFDM Pi/2 BPSK	1	1	/	23.26	/
		1	137	/	23.21	/
		1	271	/	23.10	/
		135	0	/	22.89	/
		135	69	/	23.25	/
		135	138	/	22.81	/
		270	0	/	22.80	/
	DFT-s-OFDM QPSK	1	1	/	23.31	/
		1	137	/	23.14	/
		1	271	/	23.03	/
		135	0	/	22.44	/
		135	69	/	23.29	/
		135	138	/	22.20	/
		270	0	/	22.27	/
	DFT-s-OFDM 16QAM	1	1	/	22.36	/
	DFT-s-OFDM 64QAM	1	1	/	20.77	/
	DFT-s-OFDM 256QAM	1	1	/	18.36	/

BW	MCS Index	Channel		633000	633334	633666
		Frequence (MHz)		3495	3500.01	3504.99
90M	DFT-s-OFDM QPSK	1	1	23.15	23.24	23.03
BW	MCS Index	Channel		632668	633334	634000
		Frequence (MHz)		3490.02	3500.01	3510
80M	DFT-s-OFDM QPSK	1	1	23.28	23.07	22.86
BW	MCS Index	Channel		632334	633334	634332
		Frequence (MHz)		3485.01	3500.01	3514.98
70M	DFT-s-OFDM QPSK	1	1	23.04	23.22	23.04
BW	MCS Index	Channel		632000	633334	634666
		Frequence (MHz)		3480	3500.01	3519.99
60M	DFT-s-OFDM QPSK	1	1	23.15	23.20	22.93
BW	MCS Index	Channel		631668	633334	635000
		Frequence (MHz)		3475.02	3500.01	3525
50M	DFT-s-OFDM QPSK	1	1	23.14	23.24	23.12
BW	MCS Index	Channel		631334	633334	635332
		Frequence (MHz)		3470.01	3500.01	3529.98
40M	DFT-s-OFDM QPSK	1	1	23.12	23.23	22.97
BW	MCS Index	Channel		631000	633334	635666
		Frequence (MHz)		3465	3500.01	3534.99
30M	DFT-s-OFDM QPSK	1	1	23.15	23.25	23.10
BW	MCS Index	Channel		630668	633334	636000
		Frequence (MHz)		3460.02	3500.01	3540
20M	DFT-s-OFDM QPSK	1	1	23.18	23.29	23.09
BW	MCS Index	Channel		630334	633334	636332
		Frequence (MHz)		3455.01	3500.01	3544.98
10M	DFT-s-OFDM QPSK	1	1	23.01	23.18	22.97

EIRP

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CHANNEL BANDWIDTH: 10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
510000	2550	23.38	1.2	24.58	287.08	2
520002	2600.01	23.33	1.2	24.53	283.79	2
529998	2649.99	23.42	1.2	24.62	289.73	2

CHANNEL BANDWIDTH: 15MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
510498	2552.49	23.45	1.2	24.65	291.74	2
520002	2600.01	23.4	1.2	24.6	288.4	2
529500	2647.5	23.52	1.2	24.72	296.48	2

CHANNEL BANDWIDTH: 20MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
510996	2554.98	23.27	1.2	24.47	279.9	2
520002	2600.01	23.23	1.2	24.43	277.33	2
528996	2644.98	23.36	1.2	24.56	285.76	2

CHANNEL BANDWIDTH: 40MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
513000	2565	23.48	1.2	24.68	293.76	2
520002	2600.01	23.38	1.2	24.58	287.08	2
526998	2634.99	23.48	1.2	24.68	293.76	2

CHANNEL BANDWIDTH: 50MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
5140020	2570.01	23.36	1.2	24.56	285.76	2
520002	2600.01	23.34	1.2	24.54	284.45	2
525996	2629.98	23.26	1.2	24.46	279.25	2

CHANNEL BANDWIDTH: 60MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
515004	2575.02	23.49	1.2	24.69	294.44	2
520002	2600.01	23.47	1.2	24.67	293.09	2
525000	2625	23.47	1.2	24.67	293.09	2

CHANNEL BANDWIDTH: 70MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
516000	2580	23.33	1.2	24.53	283.79	2
520002	2600.01	23.3	1.2	24.5	281.84	2
523998	2619.99	23.31	1.2	24.51	282.49	2

CHANNEL BANDWIDTH: 80MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
517002	2585.01	23.2	1.2	24.4	275.42	2
520002	2600.01	23.4	1.2	24.6	288.4	2
522996	2614.98	23.34	1.2	24.54	284.45	2

CHANNEL BANDWIDTH: 90MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
518004	2590.02	23.39	1.2	24.59	287.74	2
520002	2600.01	23.25	1.2	24.45	278.61	2
522000	2610	23.42	1.2	24.62	289.73	2

CHANNEL BANDWIDTH: 100MHz Pi/2 BPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
519000	2595	23.43	1.2	24.63	290.4	2
520002	2600.01	23.38	1.2	24.58	287.08	2
520998	2604.99	23.5	1.2	24.7	295.12	2

CHANNEL BANDWIDTH: 100MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
519000	2595	23.47	1.2	24.67	293.09	2
520002	2600.01	23.43	1.2	24.63	290.4	2
520998	2604.99	23.54	1.2	24.74	297.85	2

CHANNEL BANDWIDTH: 100MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
509202	2546.01	21.72	1.2	22.92	195.88	2
519000	2595	21.78	1.2	22.98	198.61	2
520002	2600.01	21.99	1.2	23.19	208.45	2

CHANNEL BANDWIDTH: 100MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
519000	2595	20.68	1.2	21.88	154.17	2
520002	2600.01	20.76	1.2	21.96	157.04	2
520998	2604.99	20.9	1.2	22.1	162.18	2

CHANNEL BANDWIDTH: 100MHz 256QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
519000	2595	18.38	1.2	19.58	90.78	2
520002	2600.01	18.34	1.2	19.54	89.95	2
520998	2604.99	18.58	1.2	19.78	95.06	2

REMARKS: ERP Output Power (dBm) = EIRP (dBm) -2.15(dB).

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CHANNEL BANDWIDTH: 10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
630334	3455.01	23.43	1.5	24.93	311.17	1
633334	3500.01	23.33	1.5	24.83	304.09	1
636332	3544.98	23.1	1.5	24.6	288.4	1

CHANNEL BANDWIDTH: 20MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
630668	3460.02	23.42	1.5	24.92	310.46	1
633334	3500.01	23.3	1.5	24.8	302	1
636000	3540	23.11	1.5	24.61	289.07	1

CHANNEL BANDWIDTH: 30MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
631000	3465	23.4	1.5	24.9	309.03	1
633334	3500.01	23.33	1.5	24.83	304.09	1
635666	3534.99	23.09	1.5	24.59	287.74	1

CHANNEL BANDWIDTH: 40MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
631334	3470.01	23.5	1.5	25	316.23	1
633334	3500.01	23.4	1.5	24.9	309.03	1
635332	3529.98	23.24	1.5	24.74	297.85	1

CHANNEL BANDWIDTH: 50MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
631668	3475.02	23.46	1.5	24.96	313.33	1
633334	3500.01	23.5	1.5	25	316.23	1
635000	3525	23.23	1.5	24.73	297.17	1

CHANNEL BANDWIDTH: 60MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
632000	3480	23.44	1.5	24.94	311.89	1
633334	3500.01	23.27	1.5	24.77	299.92	1
634666	3519.99	23.43	1.5	24.93	311.17	1

CHANNEL BANDWIDTH: 70MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
632334	3485.01	23.21	1.5	24.71	295.8	1
633334	3500.01	23.48	1.5	24.98	314.77	1
634332	3514.98	23.32	1.5	24.82	303.39	1

CHANNEL BANDWIDTH: 80MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
632668	3490.02	23.33	1.5	24.83	304.09	1
633334	3500.01	23.33	1.5	24.83	304.09	1
634000	3510	23.13	1.5	24.63	290.4	1

CHANNEL BANDWIDTH: 90MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
633000	3495	23.43	1.5	24.93	311.17	1
633334	3500.01	23.46	1.5	24.96	313.33	1
633666	3504.99	23.36	1.5	24.86	306.2	1

CHANNEL BANDWIDTH: 100MHz Pi/2 BPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
633334	3500.01	23.5	1.5	25	316.23	1

CHANNEL BANDWIDTH: 100MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
633334	3500.01	23.52	1.5	25.02	317.69	1

CHANNEL BANDWIDTH: 100MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
633334	3500.01	22.84	1.5	24.34	271.64	1

CHANNEL BANDWIDTH: 100MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
633334	3500.01	21.1	1.5	22.6	181.97	1

CHANNEL BANDWIDTH: 100MHz 256QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
633334	3500.01	18.7	1.5	20.2	104.71	1

REMARKS: ERP Output Power (dBm) = EIRP (dBm) -2.15(dB).

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CHANNEL BANDWIDTH: 10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
647000	3750	22.83	1.5	24.33	271.02	1
656000	3840	23.04	1.5	24.54	284.45	1
665000	3975	23.06	1.5	24.56	285.76	1

CHANNEL BANDWIDTH: 20MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
647334	3710.01	22.8	1.5	24.3	269.15	1
656000	3840	23.11	1.5	24.61	289.07	1
664666	3969.99	22.95	1.5	24.45	278.61	1

CHANNEL BANDWIDTH: 30MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
647668	3715.02	23.03	1.5	24.53	283.79	1
656000	3840	23	1.5	24.5	281.84	1
664332	3964.98	22.94	1.5	24.44	277.97	1

CHANNEL BANDWIDTH: 40MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
648000	3720	23.09	1.5	24.59	287.74	1
656000	3840	23	1.5	24.5	281.84	1
664000	3960	22.81	1.5	24.31	269.77	1

CHANNEL BANDWIDTH: 50MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
648334	3725.01	22.76	1.5	24.26	266.69	1
656000	3840	22.94	1.5	24.44	277.97	1
663666	3954.99	22.8	1.5	24.3	269.15	1

CHANNEL BANDWIDTH: 60MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
648668	3730.02	22.82	1.5	24.32	270.4	1
656000	3840	22.95	1.5	24.45	278.61	1
663332	3949.98	22.92	1.5	24.42	276.69	1

CHANNEL BANDWIDTH: 70MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
649000	3735	23.04	1.5	24.54	284.45	1
656000	3840	23.07	1.5	24.57	286.42	1
663000	3945	22.89	1.5	24.39	274.79	1

CHANNEL BANDWIDTH: 80MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
649334	3740.01	22.89	1.5	24.39	274.79	1
656000	3840	23.15	1.5	24.65	291.74	1
662666	3939.99	22.85	1.5	24.35	272.27	1

CHANNEL BANDWIDTH: 90MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
649668	3745.02	23.08	1.5	24.58	287.08	1
656000	3840	23.12	1.5	24.62	289.73	1
662332	3934.98	22.81	1.5	24.31	269.77	1

CHANNEL BANDWIDTH: 100MHz Pi/2 BPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
650000	3750	23	1.5	24.5	281.84	1
656000	3840	23.08	1.5	24.58	287.08	1
662000	3930	22.95	1.5	24.45	278.61	1

CHANNEL BANDWIDTH: 100MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
650000	3750	23.01	1.5	24.51	282.49	1
656000	3840	23.16	1.5	24.66	292.42	1
662000	3930	22.98	1.5	24.48	280.54	1

CHANNEL BANDWIDTH: 100MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
650000	3750	21.86	1.5	23.36	216.77	1
656000	3840	22.1	1.5	23.6	229.09	1
662000	3930	21.95	1.5	23.45	221.31	1

CHANNEL BANDWIDTH: 100MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
650000	3750	20.54	1.5	22.04	159.96	1
656000	3840	20.68	1.5	22.18	165.2	1
662000	3930	20.76	1.5	22.26	168.27	1

CHANNEL BANDWIDTH: 100MHz 256QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
650000	3750	18.36	1.5	19.86	96.83	1
656000	3840	18.5	1.5	20	100	1
662000	3930	18.3	1.5	19.8	95.5	1

REMARKS: ERP Output Power (dBm) = EIRP (dBm) -2.15(dB).

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CHANNEL BANDWIDTH: 10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
630334	3455.01	23.01	1.5	24.51	282.49	23
633334	3500.01	23.18	1.5	24.68	293.76	23
636332	3544.98	22.97	1.5	24.47	279.9	23

CHANNEL BANDWIDTH: 20MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
630668	3460.02	23.18	1.5	24.68	293.76	23
633334	3500.01	23.29	1.5	24.79	301.3	23
636000	3540	23.09	1.5	24.59	287.74	23

CHANNEL BANDWIDTH: 30MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
631000	3465	23.15	1.5	24.65	291.74	23
633334	3500.01	23.25	1.5	24.75	298.54	23
635666	3534.99	23.1	1.5	24.6	288.4	23

CHANNEL BANDWIDTH: 40MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
631334	3470.01	23.12	1.5	24.62	289.73	23
633334	3500.01	23.23	1.5	24.73	297.17	23
635332	3529.98	22.97	1.5	24.47	279.9	23

CHANNEL BANDWIDTH: 50MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
631668	3475.02	23.14	1.5	24.64	291.07	23
633334	3500.01	23.24	1.5	24.74	297.85	23
635000	3525	23.12	1.5	24.62	289.73	23

CHANNEL BANDWIDTH: 60MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
632000	3480	23.15	1.5	24.65	291.74	23
633334	3500.01	23.2	1.5	24.7	295.12	23
634666	3519.99	22.93	1.5	24.43	277.33	23

CHANNEL BANDWIDTH: 70MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
632334	3485.01	23.04	1.5	24.54	284.45	23
633334	3500.01	23.22	1.5	24.72	296.48	23
634332	3514.98	23.04	1.5	24.54	284.45	23

CHANNEL BANDWIDTH: 80MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
632668	3490.02	23.28	1.5	24.78	300.61	23
633334	3500.01	23.07	1.5	24.57	286.42	23
634000	3609.99	22.86	1.5	24.36	272.9	23

CHANNEL BANDWIDTH: 90MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
633000	3495	23.15	1.5	24.65	291.74	23
633334	3500.01	23.24	1.5	24.74	297.85	23
633666	3504.99	23.03	1.5	24.53	283.79	23

CHANNEL BANDWIDTH: 100MHz Pi/2 BPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
633334	3500.01	23.26	1.5	24.76	299.23	23

CHANNEL BANDWIDTH: 100MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
633334	3500.01	23.31	1.5	24.81	302.69	23

CHANNEL BANDWIDTH: 100MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
633334	3500.01	22.36	1.5	23.86	243.22	23

CHANNEL BANDWIDTH: 100MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
633334	3500.01	20.77	1.5	22.27	168.66	23

CHANNEL BANDWIDTH: 100MHz 256QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
633334	3500.01	18.36	1.5	19.86	96.83	23

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CHANNEL BANDWIDTH: 10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
630334	3455.01	22.91	4.61	27.52	565.05	1
633334	3500.01	22.85	4.61	27.46	557.3	1
636332	3544.98	22.88	4.61	27.49	561.16	1

CHANNEL BANDWIDTH: 20MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
630668	3460.02	22.82	4.61	27.43	553.46	1
633334	3500.01	22.84	4.61	27.45	556.02	1
636000	3540	22.92	4.61	27.53	566.35	1

CHANNEL BANDWIDTH: 30MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
631000	3465	22.83	4.61	27.44	554.74	1
633334	3500.01	22.91	4.61	27.52	565.05	1
635666	3534.99	22.87	4.61	27.48	559.87	1

CHANNEL BANDWIDTH: 40MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
631334	3470.01	22.89	4.61	27.50	562.45	1
633334	3500.01	22.87	4.61	27.48	559.87	1
635332	3529.98	22.85	4.61	27.46	557.3	1

CHANNEL BANDWIDTH: 50MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
631668	3475.02	22.94	4.61	27.55	568.97	1
633334	3500.01	22.92	4.61	27.53	566.35	1
635000	3525	22.91	4.61	27.52	565.05	1

CHANNEL BANDWIDTH: 60MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
632000	3480	22.81	4.61	27.42	552.19	1
633334	3500.01	22.94	4.61	27.55	568.97	1
634666	3519.99	22.87	4.61	27.48	559.87	1

CHANNEL BANDWIDTH: 70MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
632334	3485.01	22.85	4.61	27.46	557.3	1
633334	3500.01	22.87	4.61	27.48	559.87	1
634332	3514.98	22.93	4.61	27.54	567.66	1

CHANNEL BANDWIDTH: 80MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
632668	3490.02	22.92	4.61	27.53	566.35	1
633334	3500.01	22.89	4.61	27.50	562.45	1
634000	3510	22.82	4.61	27.43	553.46	1

CHANNEL BANDWIDTH: 90MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
633000	3495	22.88	4.61	27.49	561.16	1
633334	3500.01	22.92	4.61	27.53	566.35	1
633666	3504.99	22.84	4.61	27.45	556.02	1

CHANNEL BANDWIDTH: 100MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
633334	3500.01	22.98	4.61	27.59	574.23	1

CHANNEL BANDWIDTH: 100MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
633334	3500.01	21.97	4.61	26.58	455.08	1

CHANNEL BANDWIDTH: 100MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
633334	3500.01	20.38	4.61	24.99	315.56	1

CHANNEL BANDWIDTH: 100MHz 256QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
633334	3500.01	17.41	4.61	22.02	159.25	1

REMARKS: ERP Output Power (dBm) = EIRP (dBm) -2.15(dB).

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CHANNEL BANDWIDTH: 10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
647000	3750	22.85	4.61	27.46	557.3	1
656000	3840	22.89	4.61	27.50	562.45	1
665000	3975	22.86	4.61	27.47	558.58	1

CHANNEL BANDWIDTH: 20MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
647334	3710.01	22.81	4.61	27.42	552.19	1
656000	3840	22.81	4.61	27.42	552.19	1
664666	3969.99	22.85	4.61	27.46	557.3	1

CHANNEL BANDWIDTH: 30MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
647668	3715.02	22.84	4.61	27.45	556.02	1
656000	3840	22.87	4.61	27.48	559.87	1
664332	3964.98	22.83	4.61	27.44	554.74	1

CHANNEL BANDWIDTH: 40MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
648000	3720	22.83	4.61	27.44	554.74	1
656000	3840	22.91	4.61	27.52	565.05	1
664000	3960	22.86	4.61	27.47	558.58	1

CHANNEL BANDWIDTH: 50MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
648334	3725.01	22.85	4.61	27.46	557.3	1
656000	3840	22.93	4.61	27.54	567.66	1
663666	3954.99	22.88	4.61	27.49	561.16	1

CHANNEL BANDWIDTH: 60MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
648668	3730.02	22.81	4.61	27.42	552.19	1
656000	3840	22.85	4.61	27.46	557.3	1
663332	3949.98	22.81	4.61	27.42	552.19	1

CHANNEL BANDWIDTH: 70MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
649000	3735	22.86	4.61	27.47	558.58	1
656000	3840	22.88	4.61	27.49	561.16	1
663000	3945	22.84	4.61	27.45	556.02	1

CHANNEL BANDWIDTH: 80MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
649334	3740.01	22.81	4.61	27.42	552.19	1
656000	3840	22.94	4.61	27.55	568.97	1
662666	3939.99	22.83	4.61	27.44	554.74	1

CHANNEL BANDWIDTH: 90MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
649668	3745.02	22.85	4.61	27.46	557.3	1
656000	3840	22.89	4.61	27.50	562.45	1
662332	3934.98	22.87	4.61	27.48	559.87	1

CHANNEL BANDWIDTH: 100MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
650000	3750	22.87	4.61	27.48	559.87	1
656000	3840	22.96	4.61	27.57	571.59	1
662000	3930	22.89	4.61	27.50	562.45	1

CHANNEL BANDWIDTH: 100MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
650000	3750	21.99	4.61	26.60	457.18	1
656000	3840	21.85	4.61	26.46	442.68	1
662000	3930	21.91	4.61	26.52	448.84	1

CHANNEL BANDWIDTH: 100MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
650000	3750	20.24	4.61	24.85	305.55	1
656000	3840	20.08	4.61	24.69	294.5	1
662000	3930	20.1	4.61	24.71	295.86	1

CHANNEL BANDWIDTH: 100MHz 256QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
650000	3750	17.32	4.61	21.93	155.99	1
656000	3840	17.3	4.61	21.91	155.27	1
662000	3930	17.26	4.61	21.87	153.85	1

REMARKS: ERP Output Power (dBm) = EIRP (dBm) -2.15(dB).

3.2 FREQUENCY STABILITY MEASUREMENT

3.2.1 LIMITS OF FREQUENCY STABILIITY MEASUREMENT

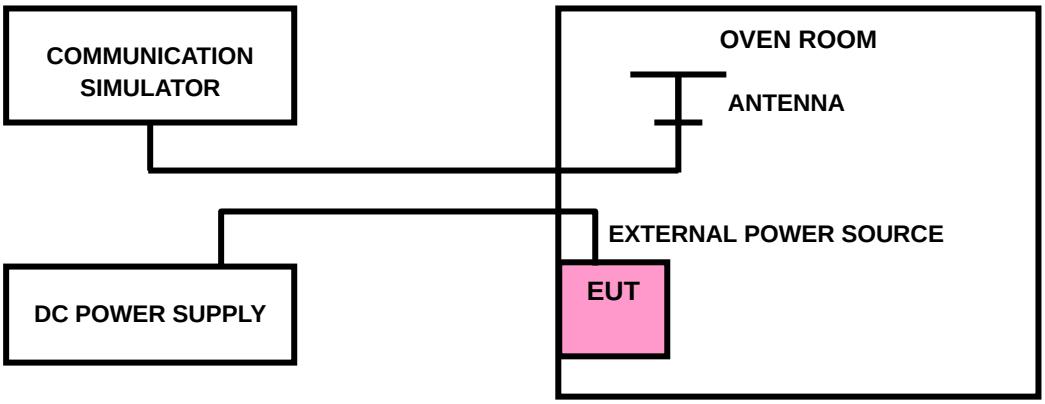
The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

3.2.2 TEST PROCEDURE

a. Device is placed at the oven room. The oven room could control the temperatures and humidity. Power warm up is at least 15 min and power applied should perform before recording frequency error.
b. EUT is connected the external power supply to control the DC input power. The test voltage range is from minimum to maximum working voltage. Each step shall be record the frequency error rate.
c. The temperature range step is 10 degrees in this test items. All temperature levels shall be hold the ±0.5℃ during the measurement testing. The each temperature step shall be at least 0.5 hours, consider the EUT could be test under the stability condition.

NOTE: The frequency error was recorded frequency error from the communication simulator.

3.2.3 TEST SETUP



3.2.4 TEST RESULTS

Please Refer to Appendix A Of this test report.

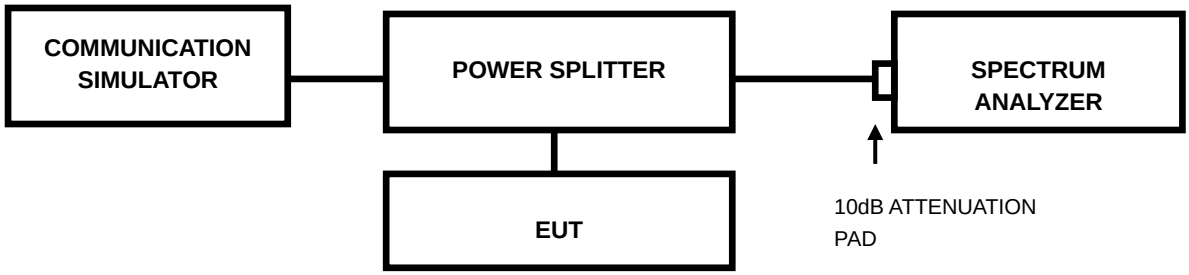
Note: VL = Low voltage(3.6V); VN/NV = Normal voltage(3.85V); VH = High voltage(4.3V);
NT = Normal temperature (25℃)

3.3 OCCUPIED BANDWIDTH MEASUREMENT

3.3.1 LIMITS OF OCCUPIED BANDWIDTH MEASUREMENT

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.

3.3.2 TEST SETUP



3.3.3 TEST PROCEDURES

a. The conducted occupied bandwidth used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer.
b. Use OBW measurement function of Spectrum analyzer to measure 99 % occupied bandwidth.

3.3.4 TEST RESULTS

Please Refer to Appendix A Of this test report.

3.4 BAND EDGE MEASUREMENT

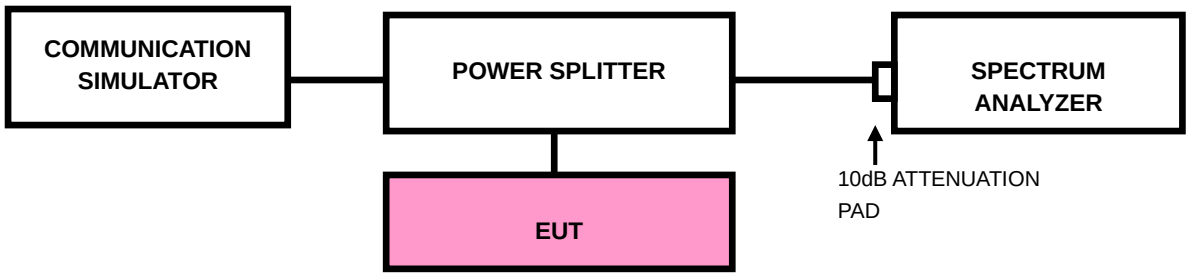
3.4.1 LIMITS OF BAND EDGE MEASUREMENT

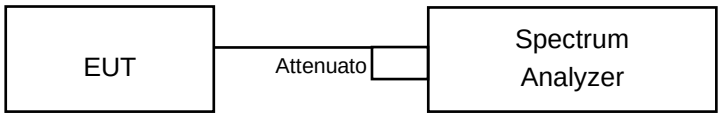
According to FCC 27.53(m)(4) specified that For mobile digital stations, the attenuation factor shall be not less than 40 + 10 log (P) dB on all frequencies between the channel edge and 5 megahertz from the channel edge, 43 + 10 log (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees. For mobile digital stations, in the 1 megahertz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least two percent may be employed.(n41)

According to FCC 27.53(l)(2) specified that 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. Compliance with this paragraph (l)(2) 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, 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.(n77/n78)

According to FCC 27.53(n)(2) specified that 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 (n)(2) 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.

3.4.2 TEST SETUP





3.4.3 TEST PROCEDURES

a) Connect the transmitter to the spectrum analyzer via coaxial cable while ensuring proper impedance matching.

b) Tune the analyzer to the nominal center frequency of the emission bandwidth (EBW).

c) Set the resolution bandwidth (RBW) ≧ 1% EBW in the 1MHz band immediately outside and adjacent to the band edge.

d) Beyond the 1MHz band from the band edge, RBW=1MHz was used.

e) Set the video bandwidth (VBW) to ≧3 x RBW.

f) Select the average power (RMS) display detector.

g) Set the number of measurement points to ≧ 1001.

h) Use auto-coupled sweep time.

i) Perform the measurement over an interval of time when the transmission is continuous and at its maximum power level.

j) The RF fundamental frequency should be excluded against the limit line in the operating frequency band and use RBW is10KHz or 100KHz.

k) Record the max trace plot into the test report.

3.4.4 TEST RESULTS

Please Refer to Appendix A Of this test report.

3.5 CONDUCTED SPURIOUS EMISSIONS

3.5.1 LIMITS OF CONDUCTED SPURIOUS EMISSIONS MEASUREMENT

The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least 43 +10 log10(P) dB. The limit of emission is equal to -13dBm.

For 5G NR n41:

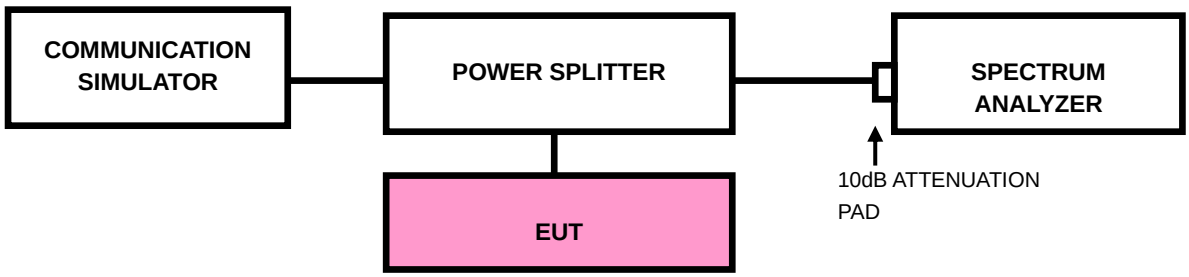
The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least 55 +10 log10(P) dB. The limit of emission is equal to -25dBm.

3.5.2 TEST PROCEDURE

a. The EUT makes a phone call to the communication simulator. All measurements were done at low, middle and high operational frequency range.

b. Measuring frequency range is from 9kHz up to a frequency including its 10th harmonic. 10dB attenuation pad is connected with spectrum. RBW=1MHz and VBW=3MHz is used for conducted emission measurement.

3.5.3 TEST SETUP



3.5.4 TEST RESULTS

NOTE：The 9K~30MHz amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required in the report.

Please Refer to Appendix Of A this test report.

3.6 RADIATED EMISSION MEASUREMENT

3.6.1 LIMITS OF RADIATED EMISSION MEASUREMENT

The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least 43 +10 log10(P) dB. The limit of emission is equal to -13dBm.

For 5G NR n41:

The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least 55 +10 log10(P) dB. The limit of emission is equal to -25dBm.

3.6.2 TEST PROCEDURES

a. Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The “Read Value” is the spectrum reading the maximum power value.
b. The substitution horn antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to “Read Value “ of step a. Record the power level of S.G.
c. EIRP = Output power level of S.G – TX cable loss + Antenna gain of substitution horn.
d. E.R.P power can be calculated form E.I.R.P power by subtracting the gain of dipole, E.R.P power = E.I.P.R power - 2.15dBi.

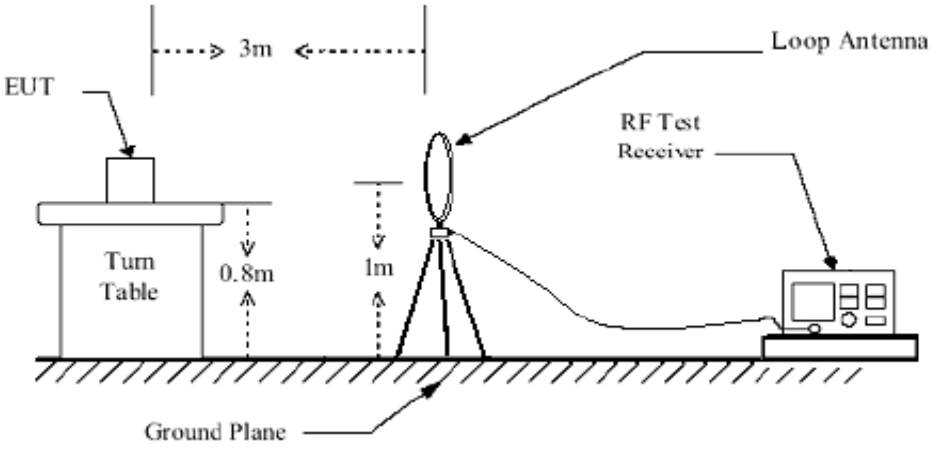
NOTE: The resolution bandwidth of spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz.

3.6.3 DEVIATION FROM TEST STANDARD

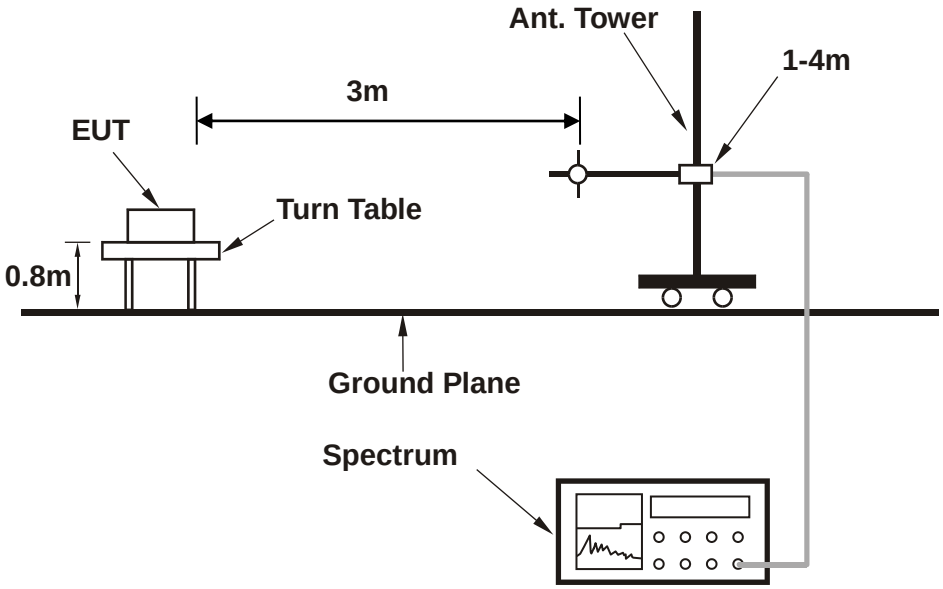
No deviation

3.6.4 TEST SETUP

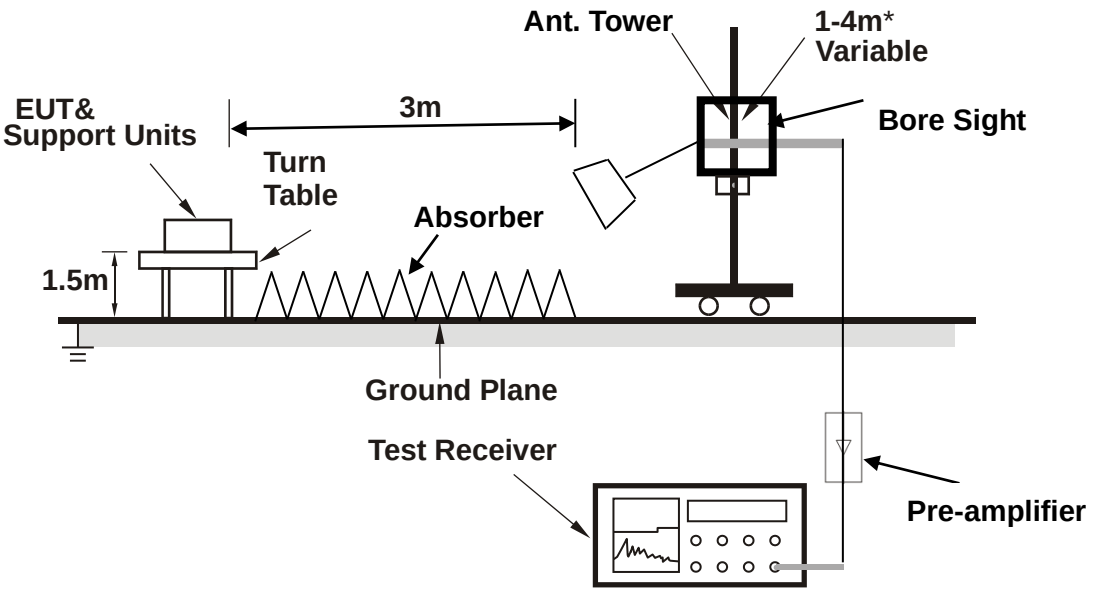
< Frequency Range below 30MHz >



< Frequency Range 30MHz~1GHz >



<Frequency Range above 1GHz>



Note: Above 1G is a directional antenna depends on the EUT height and the antenna 3dB beamwidth both, refer to section 7.3 of CISPR 16-2-3.

For the actual test configuration, please refer to the attached file (Test Setup Photo).

3.6.5 TEST RESULTS

NOTE：The 9K~30MHz amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required in the report.

5G SA BELOW 1GHz WORST-CASE DATA

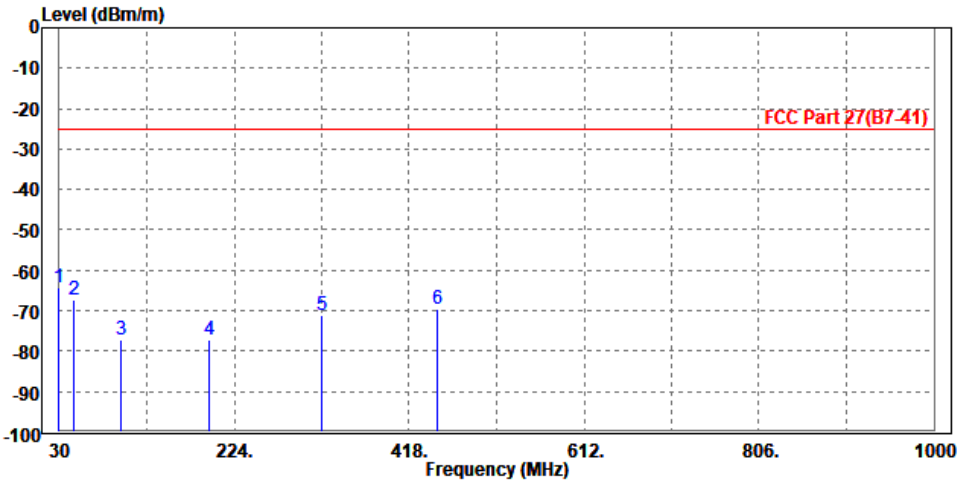
30 MHz – 1GHz data:

N41

CHANNEL BANDWIDTH: 100MHz / QPSK

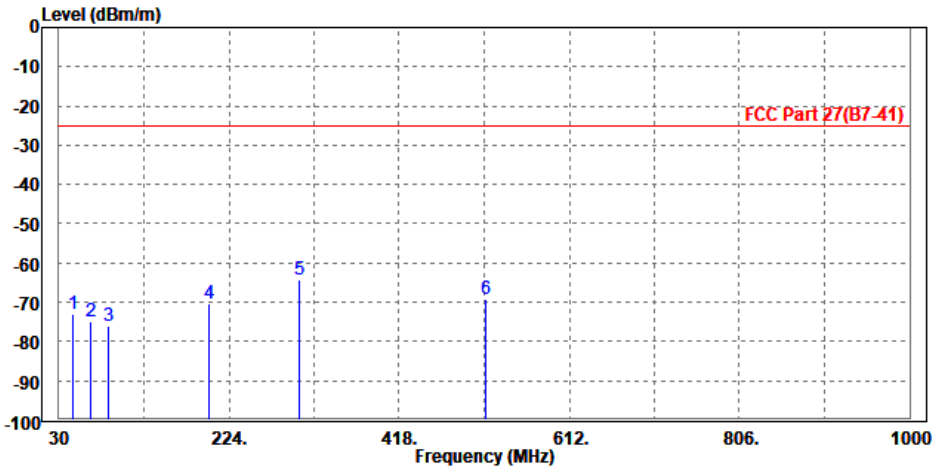
MODE	TX channel 520002	**FREQUENCY RANGE**	Below 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	DC12V
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP	30.000	-64.27	-62.29	-25.00	-39.27	-1.98	Peak	Horizontal
2		46.490	-67.22	-57.33	-25.00	-42.22	-9.89	Peak	Horizontal
3		97.900	-77.11	-64.19	-25.00	-52.11	-12.92	Peak	Horizontal
4		195.870	-77.04	-61.47	-25.00	-52.04	-15.57	Peak	Horizontal
5		321.000	-71.03	-62.62	-25.00	-46.03	-8.41	Peak	Horizontal
6		449.040	-69.57	-63.59	-25.00	-44.57	-5.98	Peak	Horizontal



MODE	TX channel 520002	FREQUENCY RANGE	Below 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1		46.490	-73.07	-52.65	-25.00	-48.07	-20.42	Peak	Vertical
2		65.890	-75.09	-55.47	-25.00	-50.09	-19.62	Peak	Vertical
3		87.230	-76.06	-58.24	-25.00	-51.06	-17.82	Peak	Vertical
4		200.720	-70.48	-61.39	-25.00	-45.48	-9.09	Peak	Vertical
5	PP	304.510	-64.33	-60.89	-25.00	-39.33	-3.44	Peak	Vertical
6		515.970	-69.11	-64.54	-25.00	-44.11	-4.57	Peak	Vertical



ABOVE 1GHz

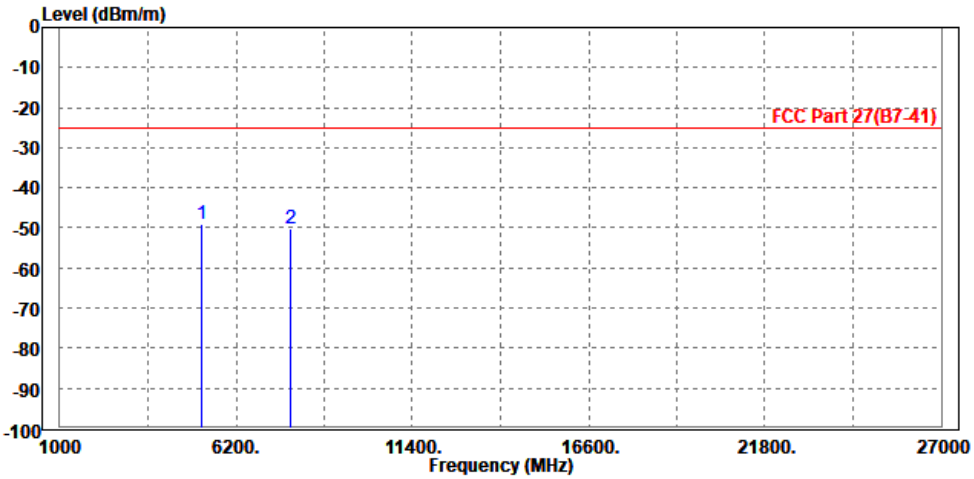
Note: For higher frequency, the emission is too low to be detected.

N41

CHANNEL BANDWIDTH: 10MHz / QPSK

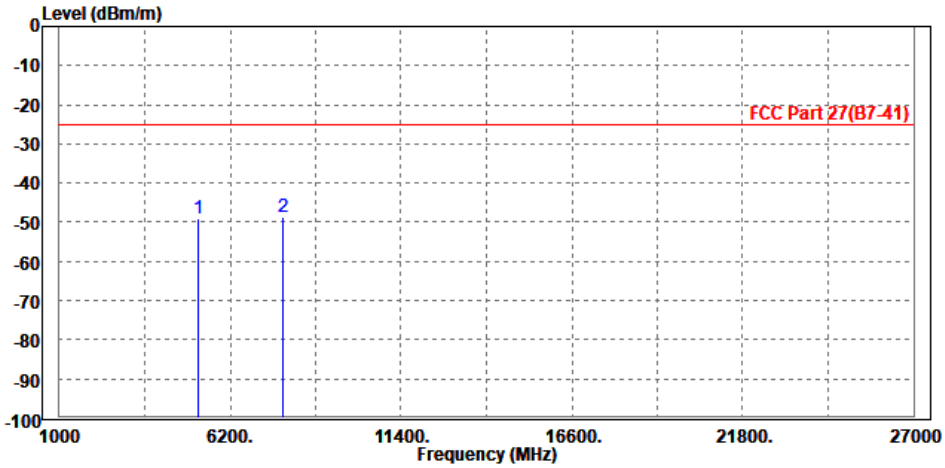
MODE	TX channel 520002	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP	5200.000	-49.24	-59.90	-25.00	-24.24	10.66	Peak	Horizontal
2		7812.000	-50.18	-64.37	-25.00	-25.18	14.19	Peak	Horizontal



MODE	TX channel 520002	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

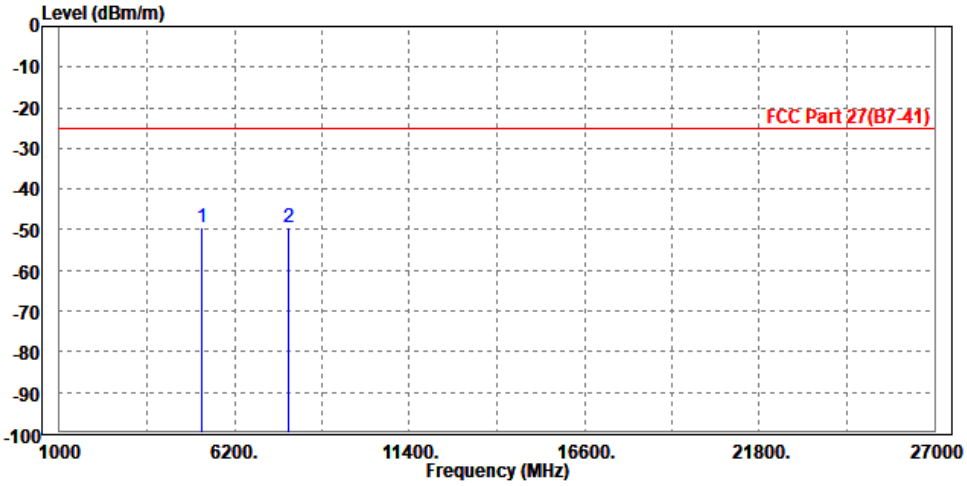
		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1		5212.000	-48.87	-59.89	-25.00	-23.87	11.02	Peak	Vertical
2	PP	7800.000	-48.81	-63.22	-25.00	-23.81	14.41	Peak	Vertical



CHANNEL BANDWIDTH: 15MHz / QPSK

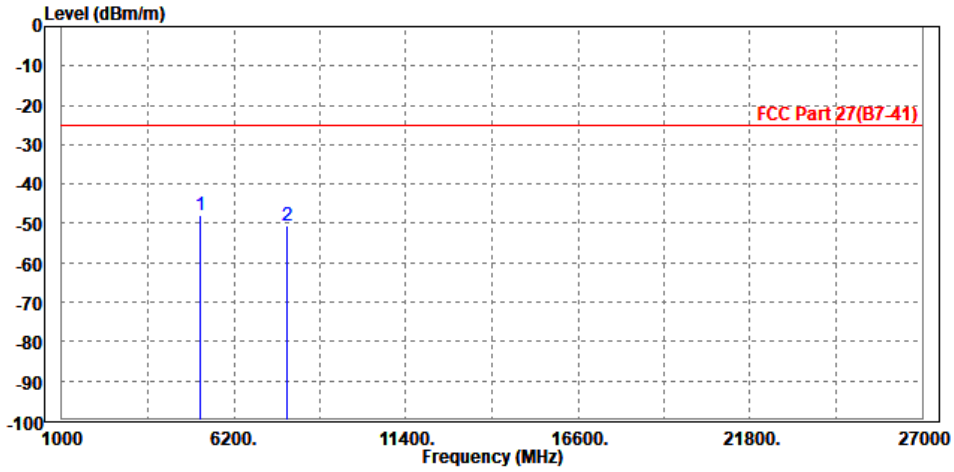
MODE	TX channel 520002	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1		5212.000	-49.61	-60.28	-25.00	-24.61	10.67	Peak	Horizontal
2	PP	7800.000	-49.34	-63.51	-25.00	-24.34	14.17	Peak	Horizontal



MODE	TX channel 520002	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

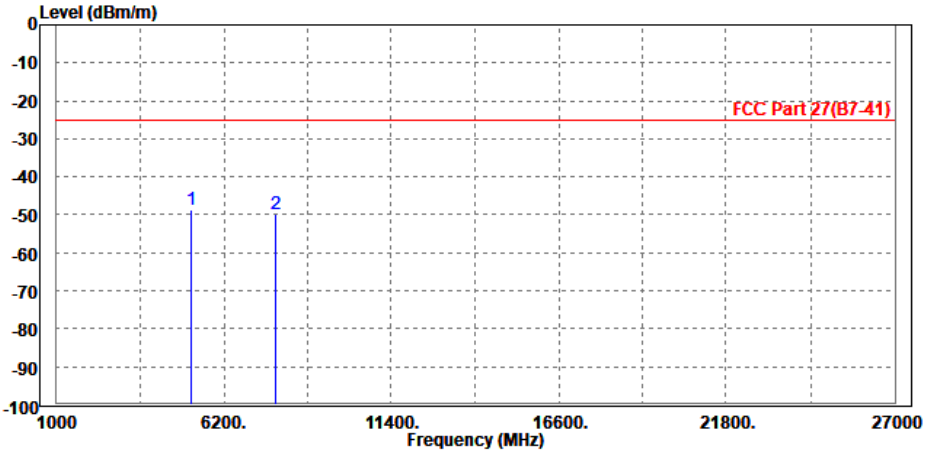
		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP	5200.000	-48.04	-59.06	-25.00	-23.04	11.02	Peak	Vertical
2		7812.000	-50.60	-65.01	-25.00	-25.60	14.41	Peak	Vertical



CHANNEL BANDWIDTH: 20MHz / QPSK

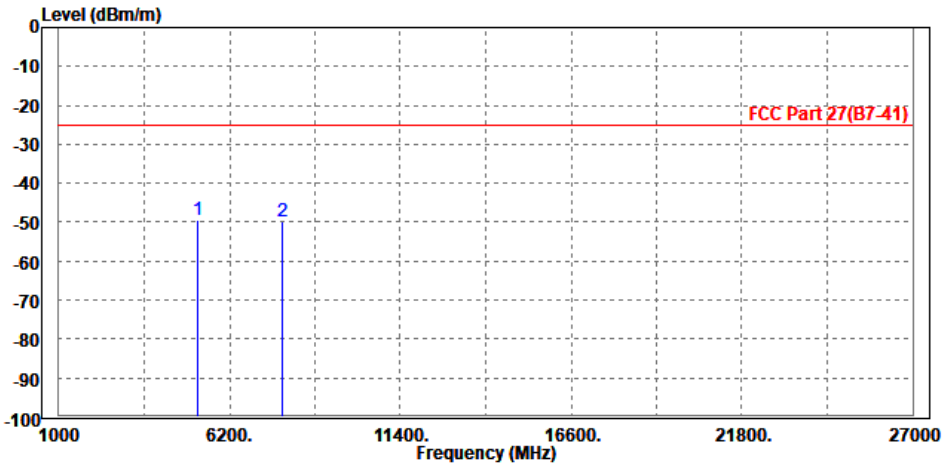
MODE	TX channel 520002	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP	5200.000	-48.66	-59.32	-25.00	-23.66	10.66	Peak	Horizontal
2		7812.000	-49.87	-64.06	-25.00	-24.87	14.19	Peak	Horizontal



MODE	TX channel 520002	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

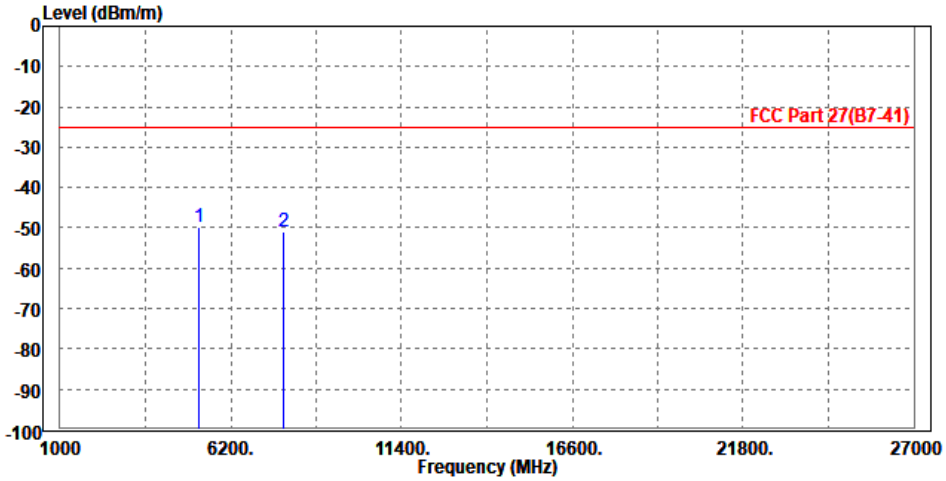
		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP	5212.000	-49.42	-60.44	-25.00	-24.42	11.02	Peak	Vertical
2		7800.000	-49.79	-64.20	-25.00	-24.79	14.41	Peak	Vertical



CHANNEL BANDWIDTH: 40MHz / QPSK

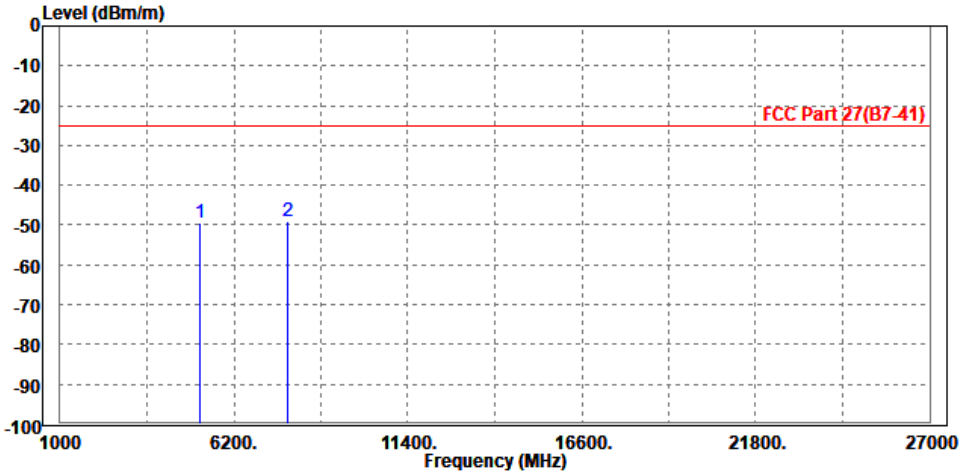
MODE	TX channel 520002	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP	5212.000	-49.95	-60.62	-25.00	-24.95	10.67	Peak	Horizontal
2		7800.000	-50.95	-65.12	-25.00	-25.95	14.17	Peak	Horizontal



MODE	TX channel 520002	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

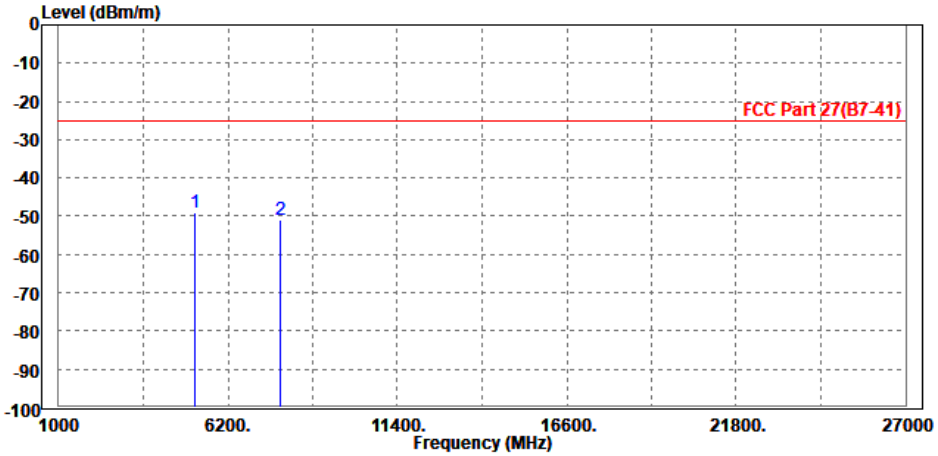
		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1		5200.000	-49.33	-60.35	-25.00	-24.33	11.02	Peak	Vertical
2	PP	7812.000	-49.21	-63.62	-25.00	-24.21	14.41	Peak	Vertical



CHANNEL BANDWIDTH: 50MHz / QPSK

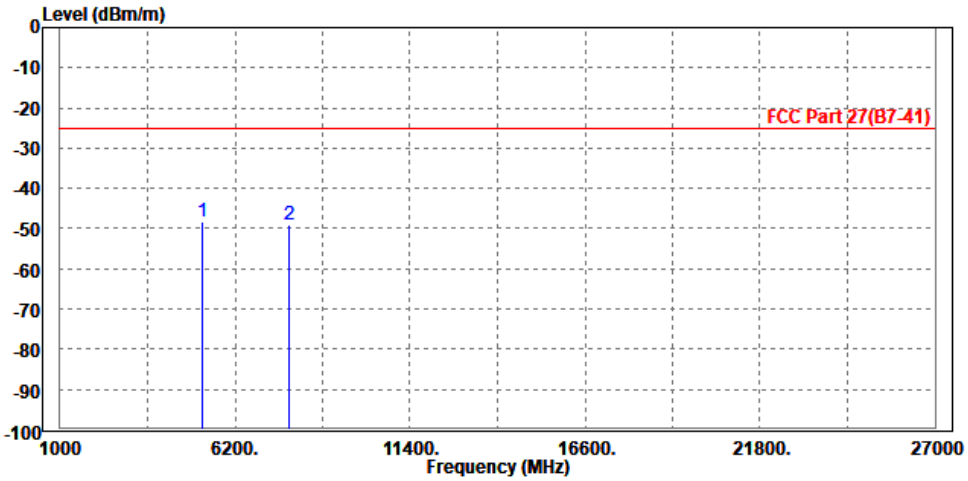
MODE	TX channel 520002	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP	5200.000	-49.09	-59.75	-25.00	-24.09	10.66	Peak	Horizontal
2		7812.000	-51.01	-65.20	-25.00	-26.01	14.19	Peak	Horizontal



MODE	TX channel 520002	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

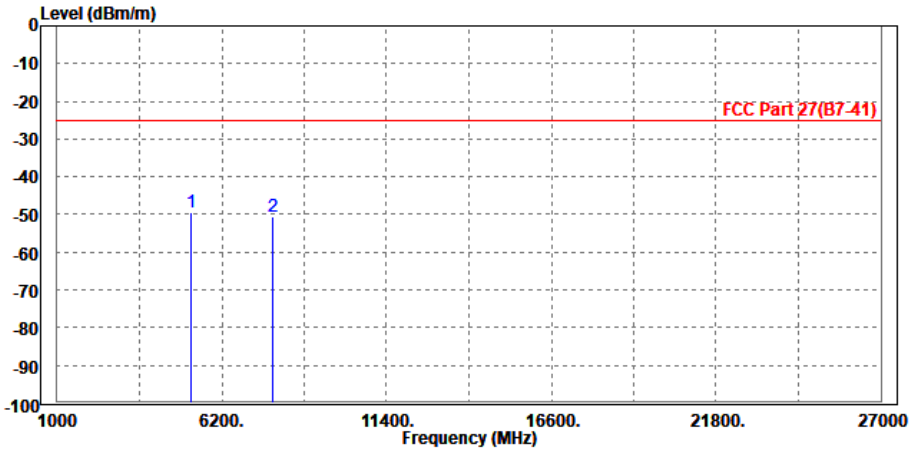
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1 PP	5212.000	-48.32	-59.34	-25.00	-23.32	11.02	Peak	Vertical
2	7800.000	-48.98	-63.39	-25.00	-23.98	14.41	Peak	Vertical



CHANNEL BANDWIDTH: 60MHz / QPSK

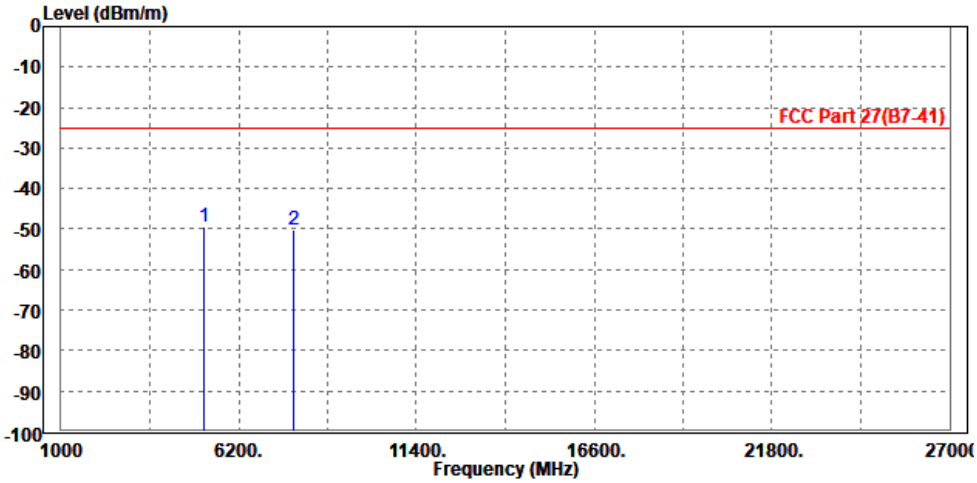
MODE	TX channel 520002	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP	5212.000	-49.40	-60.07	-25.00	-24.40	10.67	Peak	Horizontal
2		7800.000	-50.68	-64.85	-25.00	-25.68	14.17	Peak	Horizontal



MODE	TX channel 520002	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

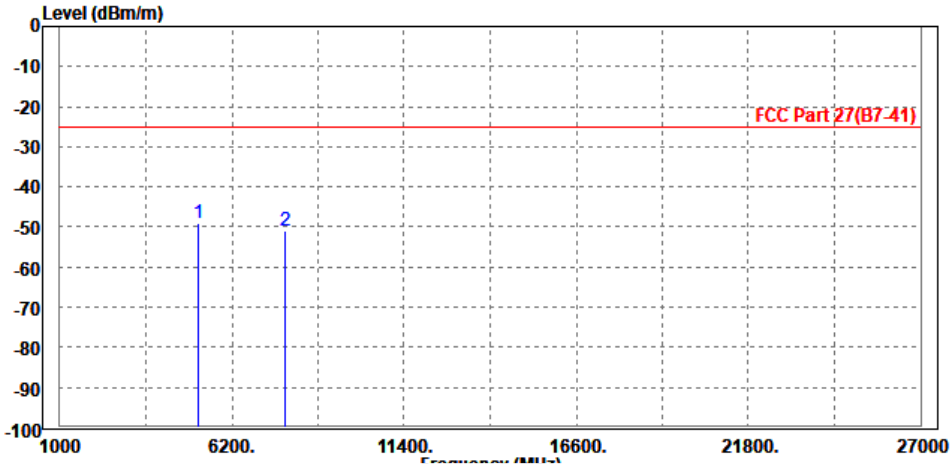
		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP	5200.000	-49.55	-60.57	-25.00	-24.55	11.02	Peak	Vertical
2		7812.000	-50.07	-64.48	-25.00	-25.07	14.41	Peak	Vertical



CHANNEL BANDWIDTH: 70MHz / QPSK

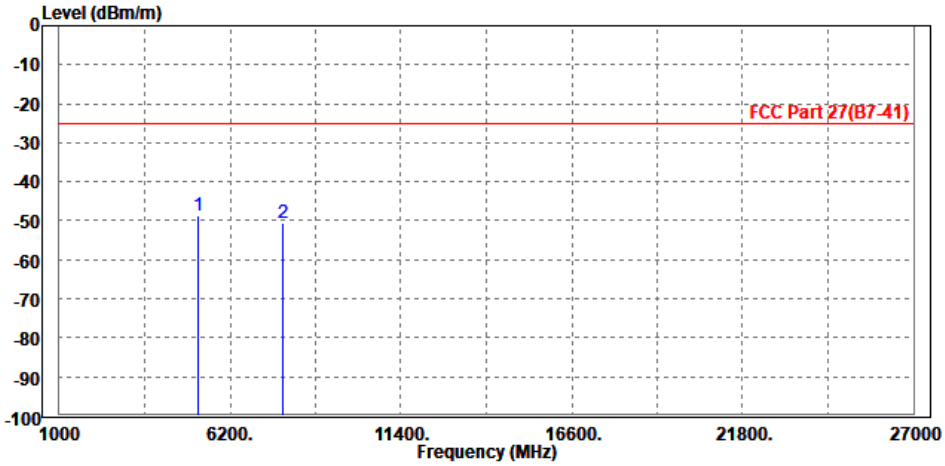
MODE	TX channel 520002	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP	5200.000	-49.15	-59.81	-25.00	-24.15	10.66	Peak	Horizontal
2		7812.000	-50.97	-65.16	-25.00	-25.97	14.19	Peak	Horizontal



MODE	TX channel 520002	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

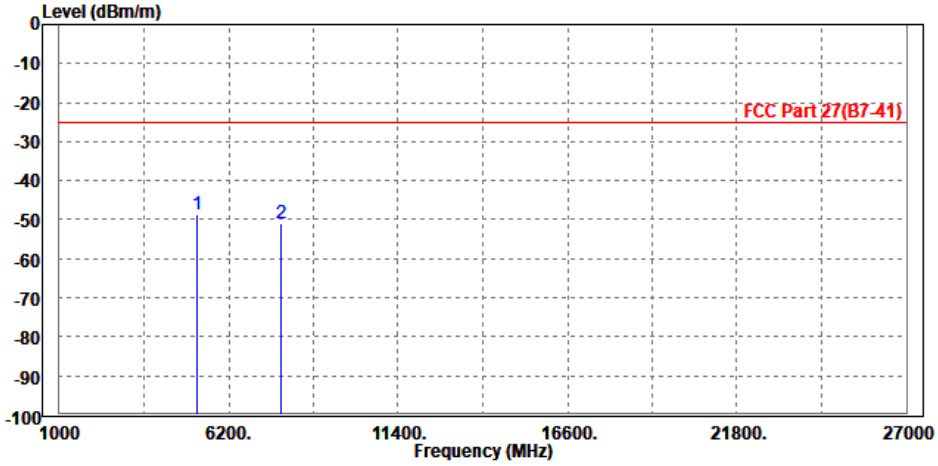
		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP	5212.000	-48.55	-59.57	-25.00	-23.55	11.02	Peak	Vertical
2		7800.000	-50.69	-65.10	-25.00	-25.69	14.41	Peak	Vertical



CHANNEL BANDWIDTH: 80MHz / QPSK

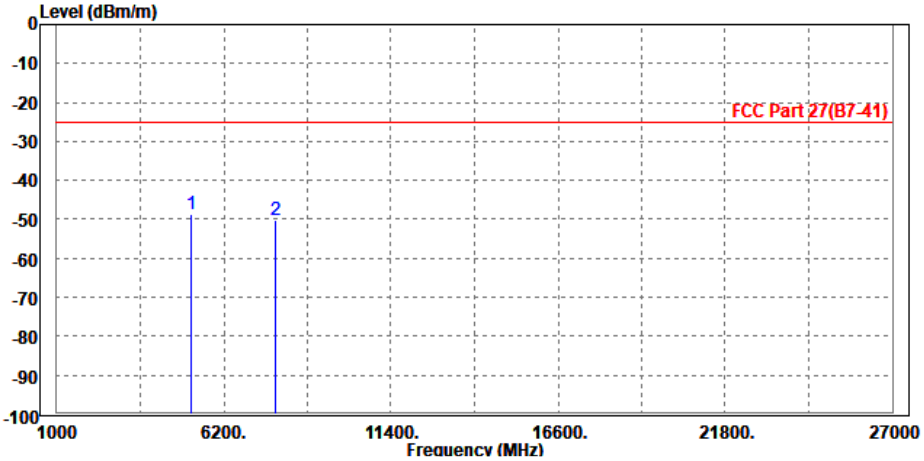
MODE	TX channel 520002	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP	5212.000	-48.65	-59.32	-25.00	-23.65	10.67	Peak	Horizontal
2		7800.000	-50.96	-65.13	-25.00	-25.96	14.17	Peak	Horizontal



MODE	TX channel 520002	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

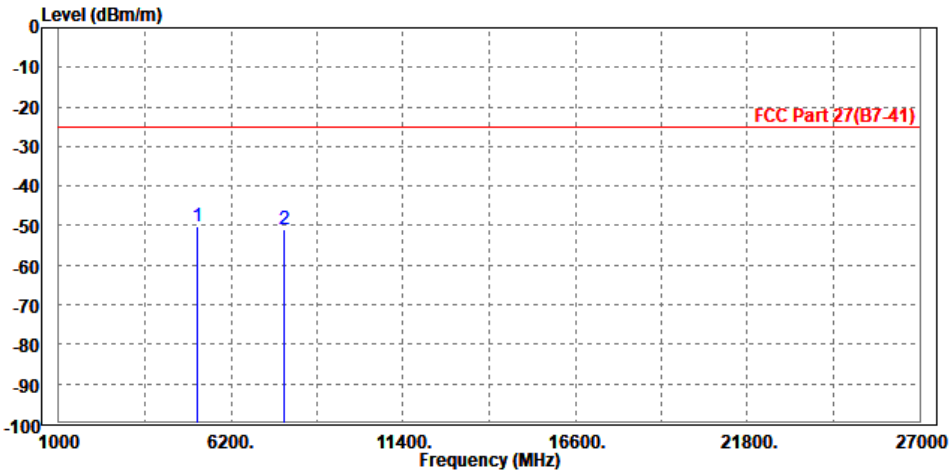
		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP	5200.000	-48.82	-59.84	-25.00	-23.82	11.02	Peak	Vertical
2		7812.000	-50.05	-64.46	-25.00	-25.05	14.41	Peak	Vertical



CHANNEL BANDWIDTH: 90MHz / QPSK

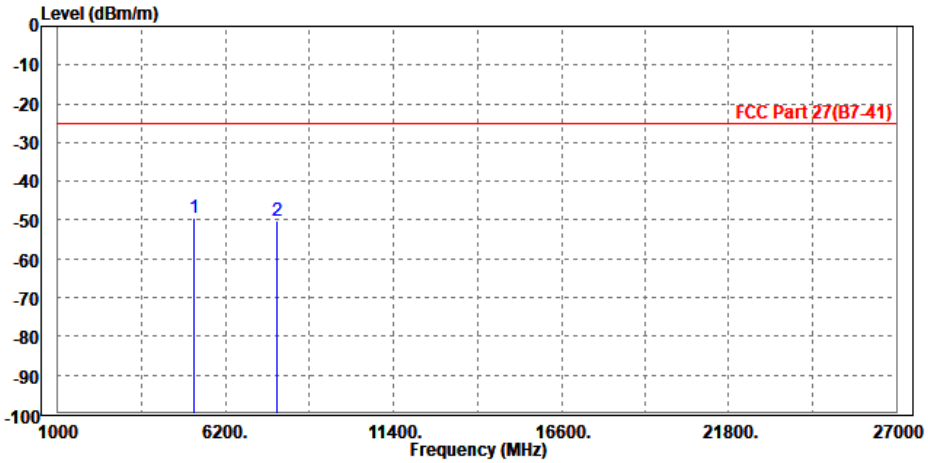
MODE	TX channel 520002	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP	5200.000	-50.29	-60.95	-25.00	-25.29	10.66	Peak	Horizontal
2		7812.000	-50.92	-65.11	-25.00	-25.92	14.19	Peak	Horizontal



MODE	TX channel 520002	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP	5212.000	-49.53	-60.55	-25.00	-24.53	11.02	Peak	Vertical
2		7800.000	-50.25	-64.66	-25.00	-25.25	14.41	Peak	Vertical

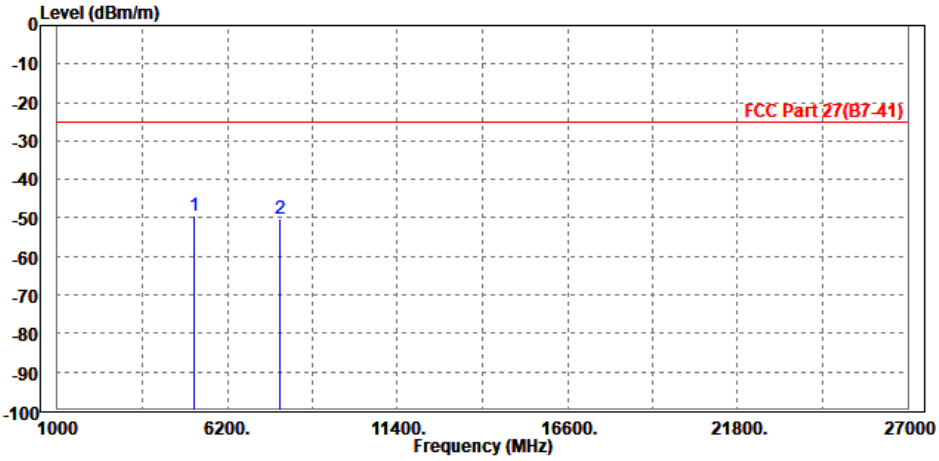


CHANNEL BANDWIDTH: 100MHz / QPSK

CH519000

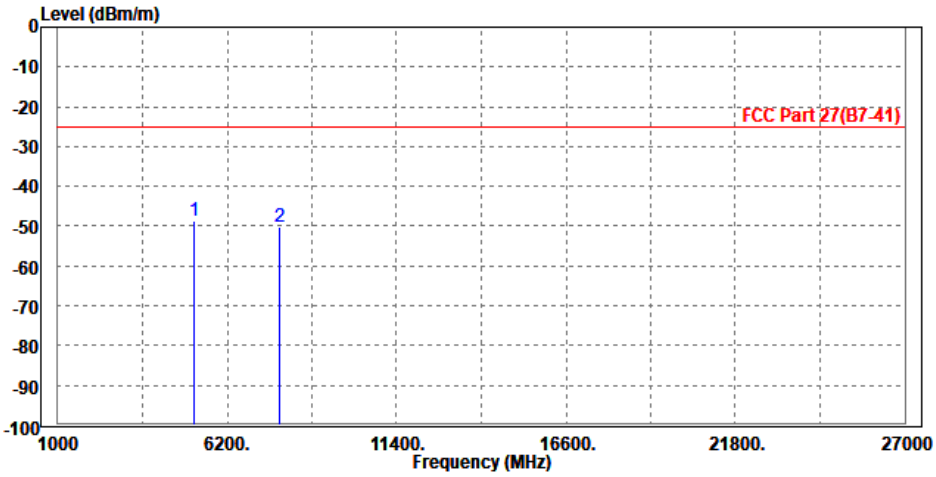
MODE	TX channel 519000	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP	5186.000	-49.41	-60.06	-25.00	-24.41	10.65	Peak	Horizontal
2		7785.000	-50.10	-64.23	-25.00	-25.10	14.13	Peak	Horizontal



MODE	TX channel 519000	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

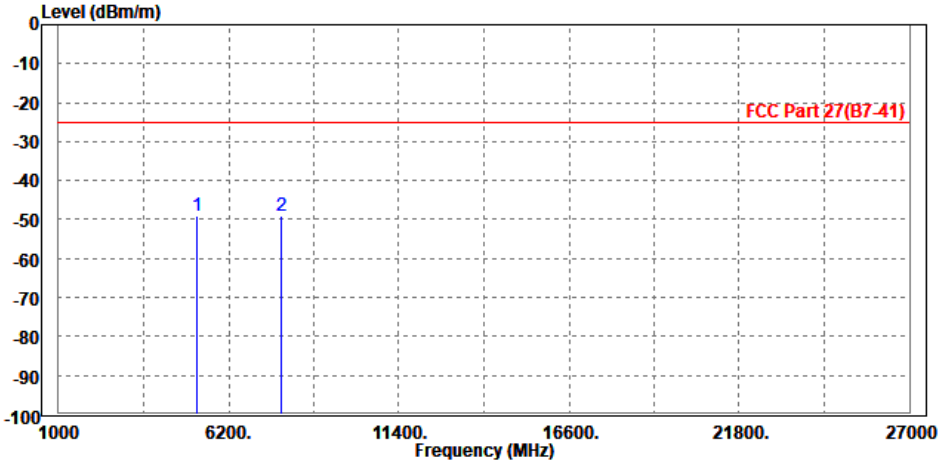
		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP	5190.000	-48.58	-59.60	-25.00	-23.58	11.02	Peak	Vertical
2		7786.000	-50.37	-64.77	-25.00	-25.37	14.40	Peak	Vertical



CH520002

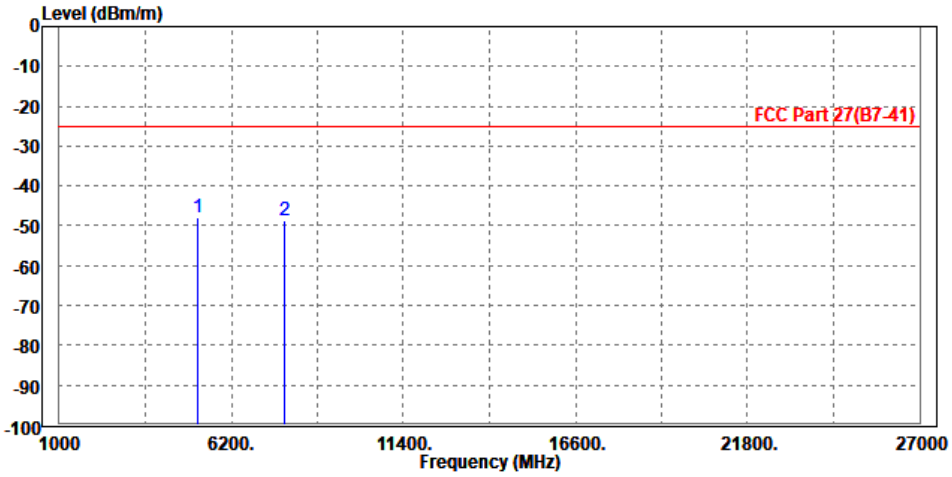
MODE	TX channel 520002	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP	5212.000	-48.91	-59.58	-25.00	-23.91	10.67	Peak	Horizontal
2		7800.000	-48.96	-63.13	-25.00	-23.96	14.17	Peak	Horizontal



MODE	TX channel 520002	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

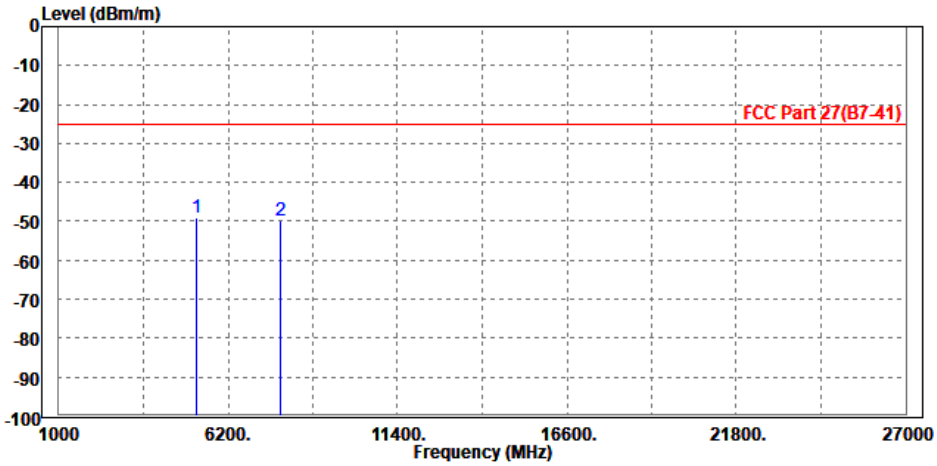
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1 PP	5200.000	-47.74	-58.76	-25.00	-22.74	11.02	Peak	Vertical
2	7812.000	-48.50	-62.91	-25.00	-23.50	14.41	Peak	Vertical



CH520998

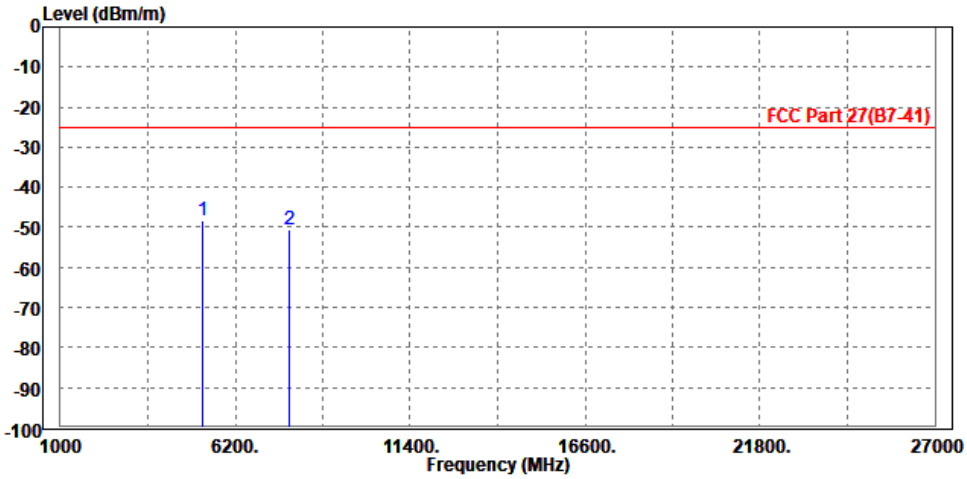
MODE	TX channel 520998	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP	5210.000	-49.07	-59.74	-25.00	-24.07	10.67	Peak	Horizontal
2		7812.000	-49.66	-63.85	-25.00	-24.66	14.19	Peak	Horizontal



MODE	TX channel 520998	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP	5212.000	-48.11	-59.13	-25.00	-23.11	11.02	Peak	Vertical
2		7815.000	-50.50	-64.92	-25.00	-25.50	14.42	Peak	Vertical



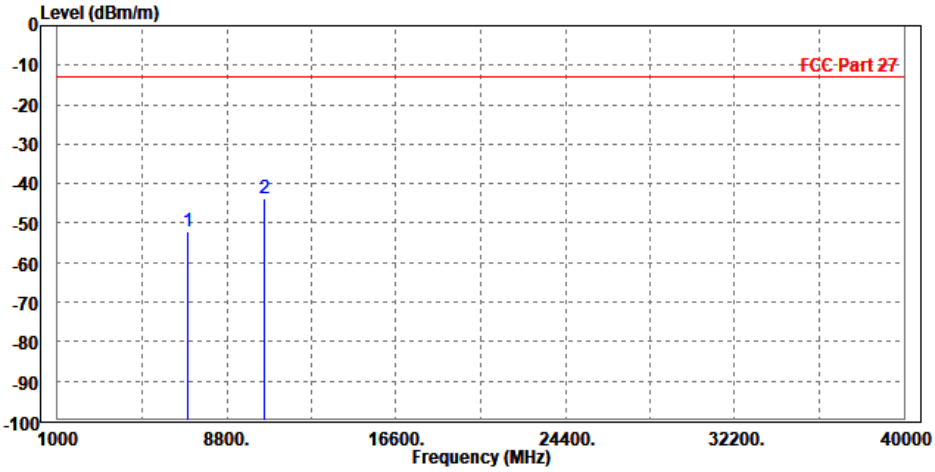
N77 (Part 27Q)

Note: For frequency above 18GHz, the emission was tested 20db below the limit so the data not recorded in the sheet.

CHANNEL BANDWIDTH: 10MHz / QPSK

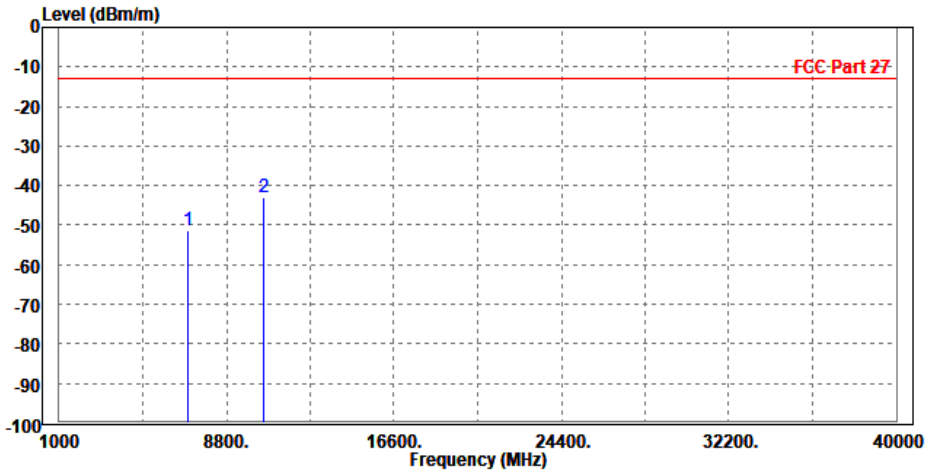
MODE	TX channel 633334	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	7006.000	-52.14	-64.86	-13.00	-39.14	12.72	Peak	Horizontal
2	PP10500.000	-43.89	-62.34	-13.00	-30.89	18.45	Peak	Horizontal



MODE	TX channel 633334	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

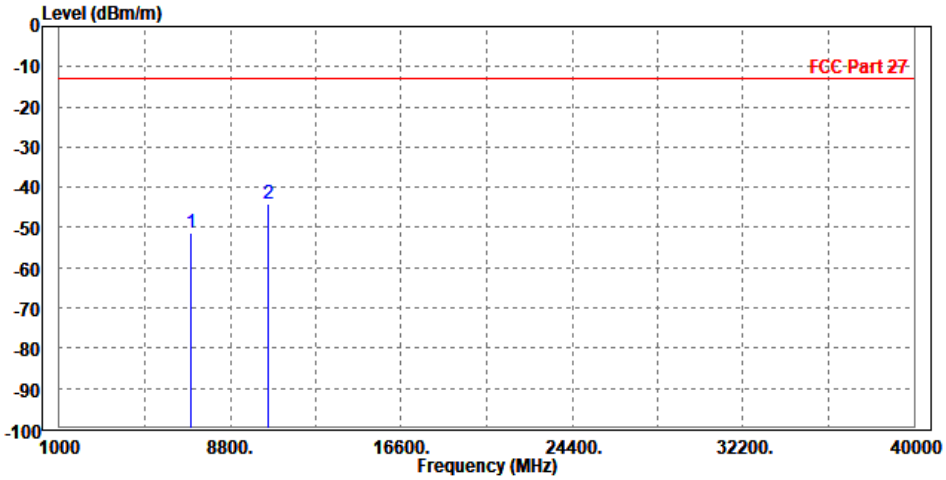
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	7000.000	-51.31	-64.28	-13.00	-38.31	12.97	Peak	Vertical
2	PP10516.000	-42.88	-61.50	-13.00	-29.88	18.62	Peak	Vertical



CHANNEL BANDWIDTH: 20MHz / QPSK

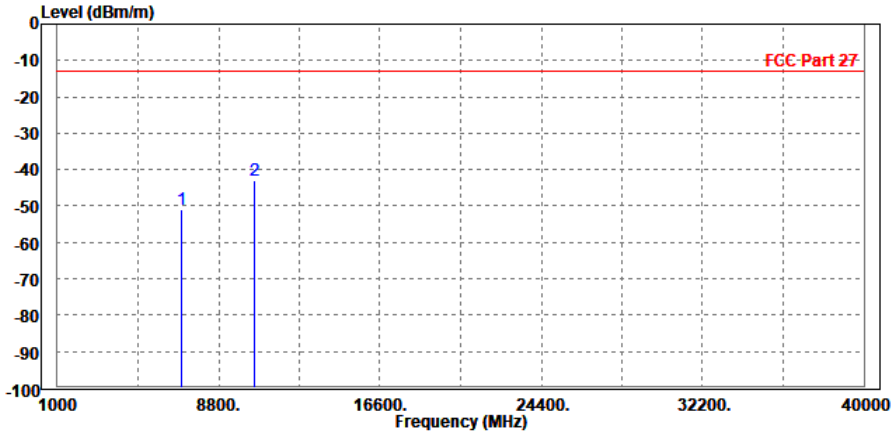
MODE	TX channel 633334	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	7000.000	-51.48	-64.19	-13.00	-38.48	12.71	Peak	Horizontal
2	PP10516.000	-44.16	-62.66	-13.00	-31.16	18.50	Peak	Horizontal



MODE	TX channel 633334	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

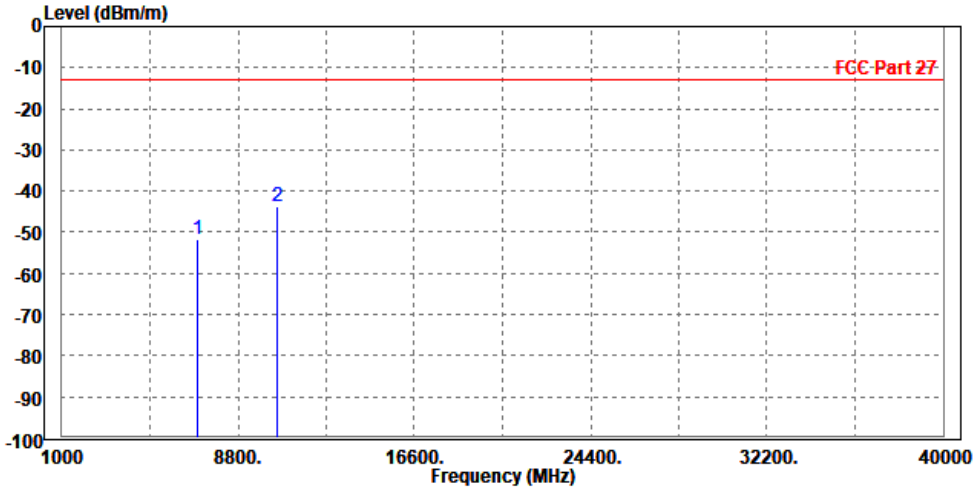
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	7006.000	-50.83	-63.81	-13.00	-37.83	12.98	Peak	Vertical
2	PP10500.000	-42.80	-61.42	-13.00	-29.80	18.62	Peak	Vertical



CHANNEL BANDWIDTH: 30MHz / QPSK

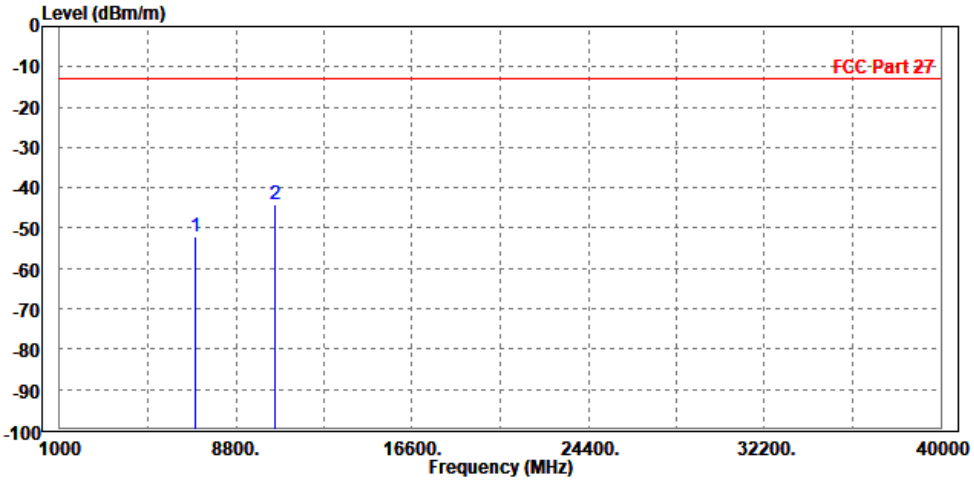
MODE	TX channel 633334	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	7006.000	-51.67	-64.39	-13.00	-38.67	12.72	Peak	Horizontal
2	PP10500.000	-43.74	-62.19	-13.00	-30.74	18.45	Peak	Horizontal



MODE	TX channel 633334	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

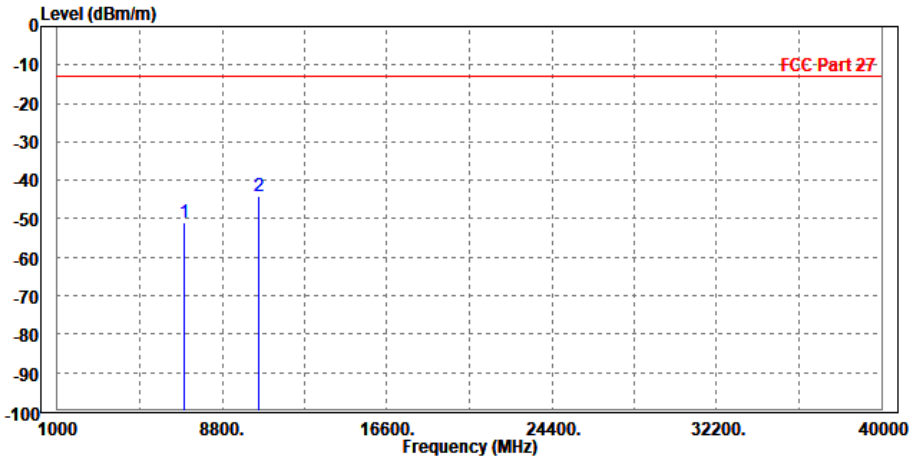
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	7000.000	-51.93	-64.90	-13.00	-38.93	12.97	Peak	Vertical
2	PP10516.000	-44.01	-62.63	-13.00	-31.01	18.62	Peak	Vertical



CHANNEL BANDWIDTH: 40MHz / QPSK

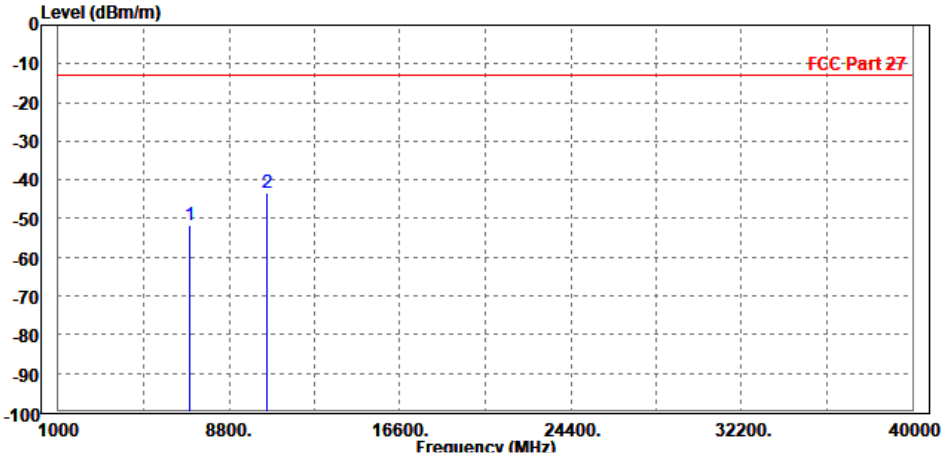
MODE	TX channel 633334	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	7006.000	-50.87	-63.59	-13.00	-37.87	12.72	Peak	Horizontal
2	PP10500.000	-44.10	-62.55	-13.00	-31.10	18.45	Peak	Horizontal



MODE	TX channel 633334	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

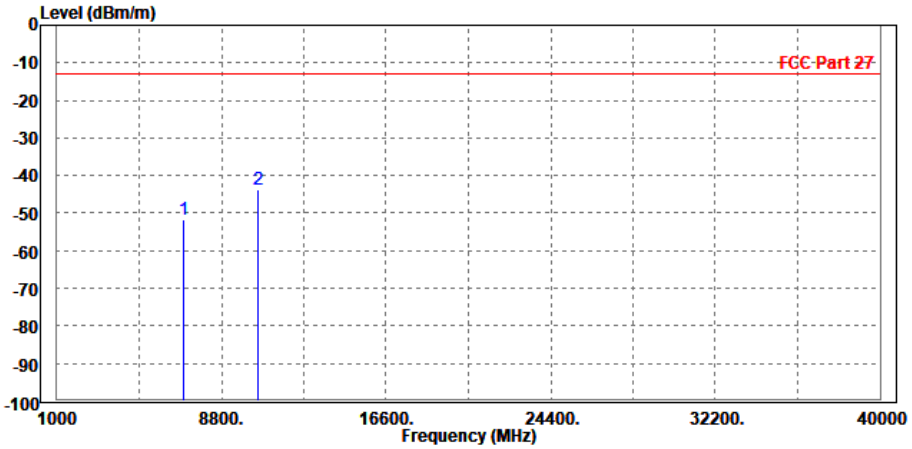
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	7006.000	-51.55	-64.53	-13.00	-38.55	12.98	Peak	Vertical
2	PP10500.000	-43.36	-61.98	-13.00	-30.36	18.62	Peak	Vertical



CHANNEL BANDWIDTH: 50MHz / QPSK

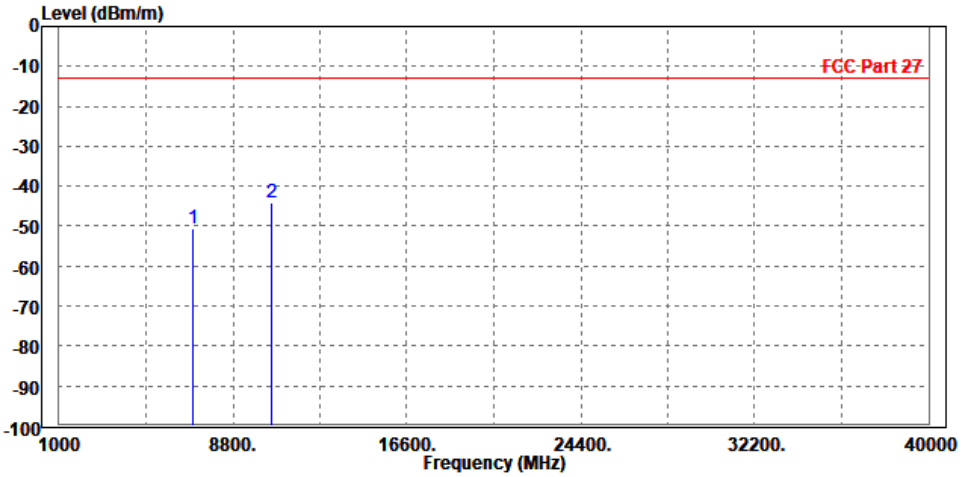
MODE	TX channel 633334	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	7000.000	-51.53	-64.24	-13.00	-38.53	12.71	Peak	Horizontal
2	PP10516.000	-43.57	-62.07	-13.00	-30.57	18.50	Peak	Horizontal



MODE	TX channel 633334	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	7006.000	-50.70	-63.68	-13.00	-37.70	12.98	Peak	Vertical
2	PP10500.000	-44.08	-62.70	-13.00	-31.08	18.62	Peak	Vertical

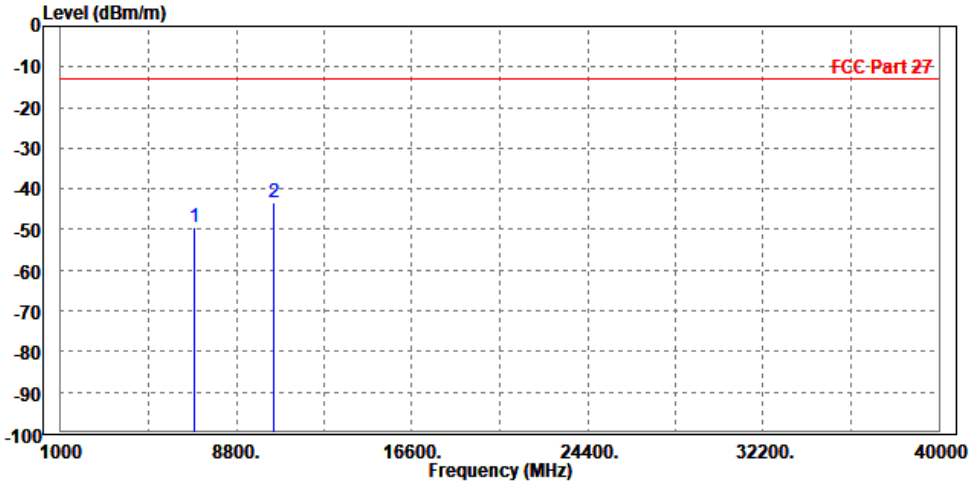


CHANNEL BANDWIDTH: 60MHz / QPSK

CH632000

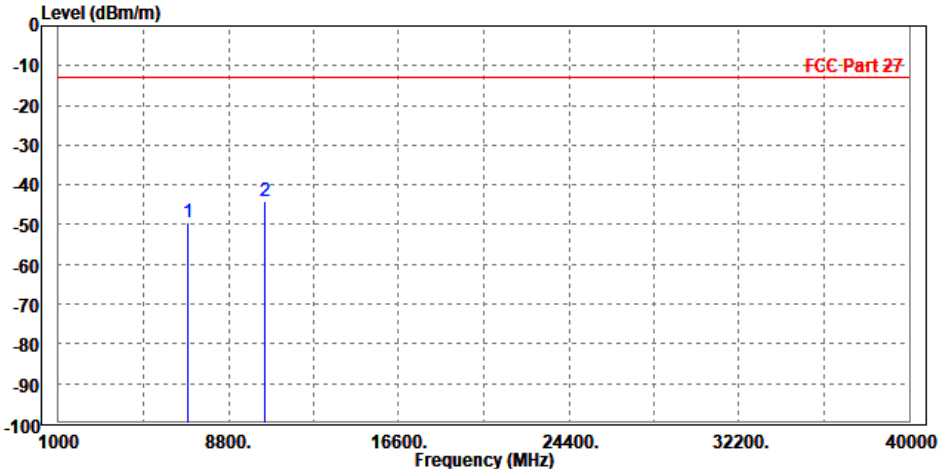
MODE	TX channel 632000	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	6967.000	-49.30	-61.99	-13.00	-36.30	12.69	Peak	Horizontal
2	PP10440.000	-43.45	-61.92	-13.00	-30.45	18.47	Peak	Horizontal



MODE	TX channel 632000	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

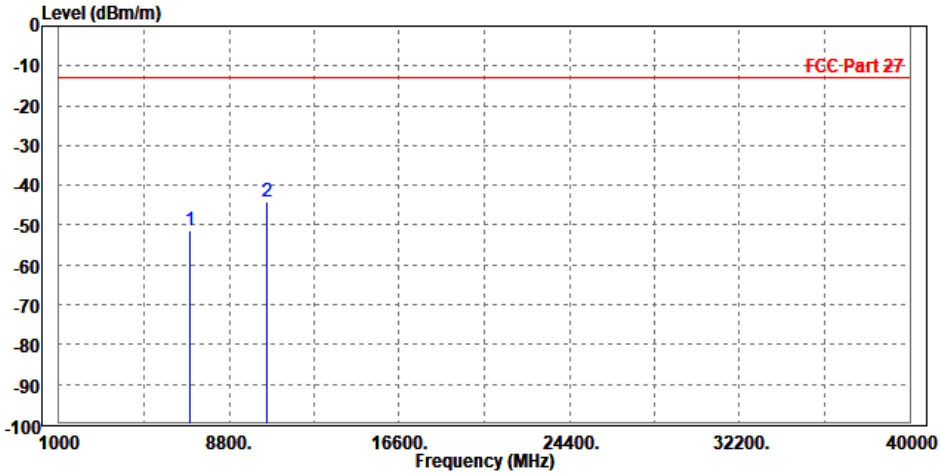
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	6960.000	-49.26	-62.23	-13.00	-36.26	12.97	Peak	Vertical
2	PP10438.000	-44.00	-62.65	-13.00	-31.00	18.65	Peak	Vertical



CH633334

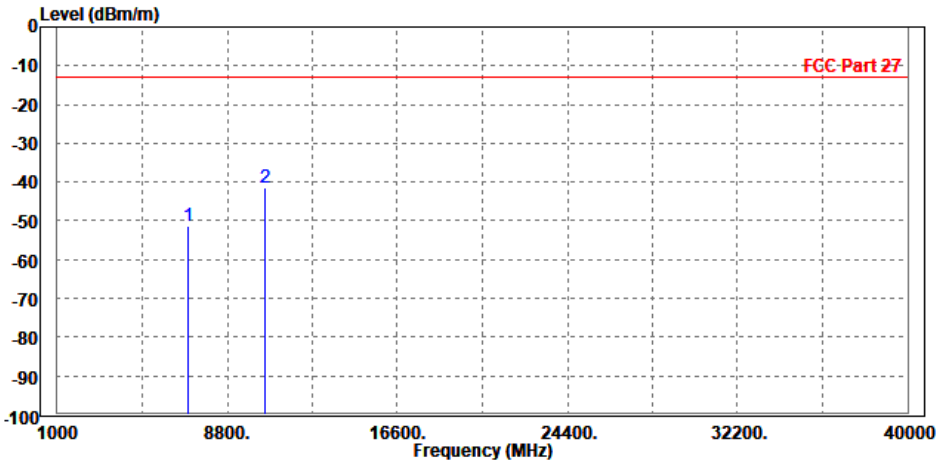
MODE	TX channel 633334	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	7006.000	-51.38	-64.10	-13.00	-38.38	12.72	Peak	Horizontal
2	PP10500.000	-44.06	-62.51	-13.00	-31.06	18.45	Peak	Horizontal



MODE	TX channel 633334	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

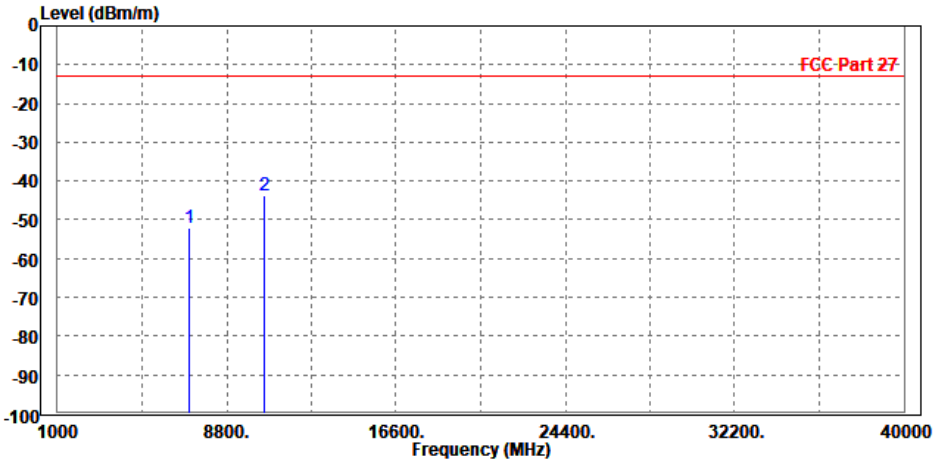
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	7000.000	-51.38	-64.35	-13.00	-38.38	12.97	Peak	Vertical
2	PP10516.000	-41.50	-60.12	-13.00	-28.50	18.62	Peak	Vertical



CH634666

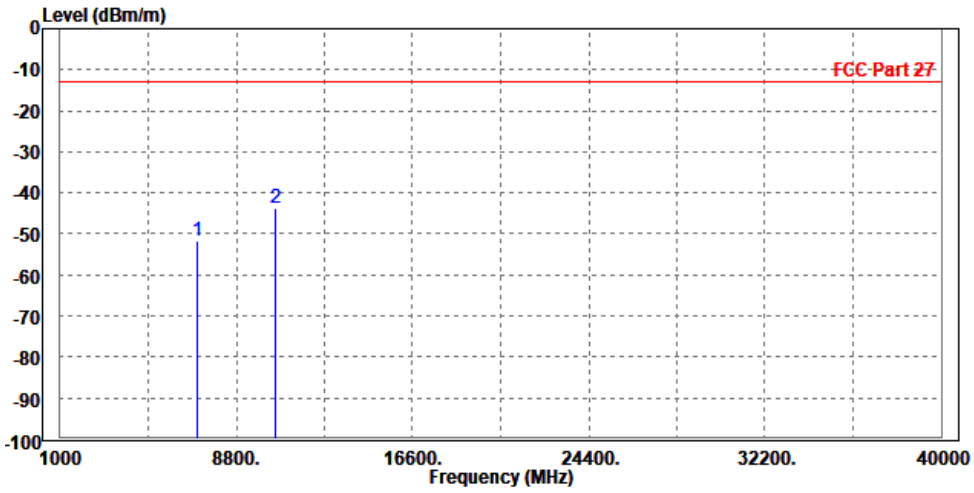
MODE	TX channel 634666	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	7040.000	-51.95	-64.72	-13.00	-38.95	12.77	Peak	Horizontal
2	PP10555.000	-43.62	-62.24	-13.00	-30.62	18.62	Peak	Horizontal



MODE	TX channel 634666	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

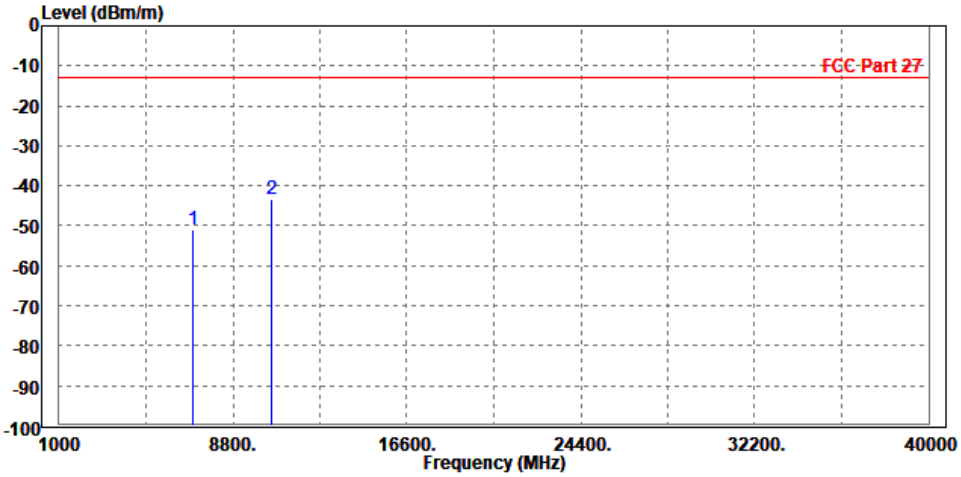
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	7045.000	-51.53	-64.61	-13.00	-38.53	13.08	Peak	Vertical
2	PP10560.000	-43.86	-62.48	-13.00	-30.86	18.62	Peak	Vertical

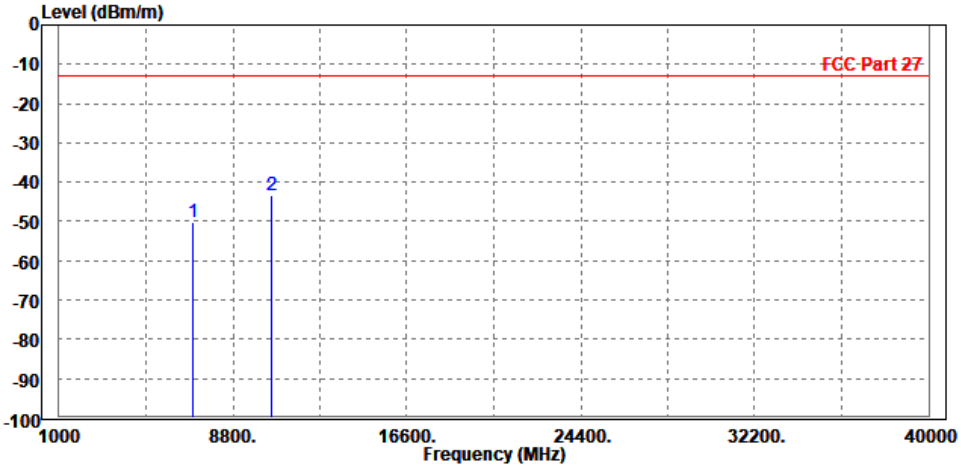


CHANNEL BANDWIDTH:70MHz / QPSK

MODE	TX channel 633334	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	7000.000	-51.02	-63.73	-13.00	-38.02	12.71	Peak	Horizontal
2	PP10516.000	-43.41	-61.91	-13.00	-30.41	18.50	Peak	Horizontal



MODE	TX channel 633334	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	7006.000	-50.38	-63.36	-13.00	-37.38	12.98	Peak	Vertical
2	PP10500.000	-43.26	-61.88	-13.00	-30.26	18.62	Peak	Vertical