

FCC TEST REPORT

(PART 96)

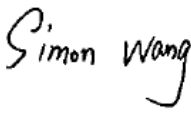
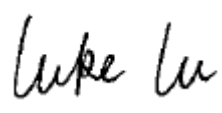
Applicant:	DataRemote Incorporated
Address:	18001 Old Cutler Rd. Suite 600, Miami, FL 33157

Manufacturer or Supplier:	DataRemote Incorporated
Address:	18001 Old Cutler Rd. Suite 600, Miami, FL 33157
Product:	Cellular Backup Router
Brand Name:	DATAREMOTE
Model Name:	90X1
FCC ID:	2AJLF-90X1
Date of tests:	Jul. 17, 2023 ~ Aug. 25, 2023

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

- ☒ **47 CFR FCC Part 96**
- ☒ **ANSI 63.26-2015**

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
 Date: Aug. 25, 2023	 Date: Aug. 25, 2023

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.

TABLE OF CONTENTS

RELEASE CONTROL RECORD	3
1 SUMMARY OF TEST RESULTS	4
1.1 MEASUREMENT UNCERTAINTY	4
1.2 TEST SITE AND INSTRUMENTS	5
2 GENERAL INFORMATION	6
2.1 GENERAL DESCRIPTION OF EUT	6
2.2 CONFIGURATION OF SYSTEM UNDER TEST	10
2.3 DESCRIPTION OF SUPPORT UNITS	11
2.4 TEST ITEM AND TEST CONFIGURATION	11
2.5 GENERAL DESCRIPTION OF APPLIED STANDARDS	14
3 TEST TYPES AND RESULTS	15
3.1 MAXIMUM EIRP MEASUREMENT	15
3.1.1 LIMITS OF MAXIMUM EIRP MEASUREMENT	15
3.1.2 TEST SETUP	15
3.1.3 TEST PROCEDURES	16
3.1.4 DEVIATION FROM TEST STANDARD	16
3.1.5 TEST RESULTS	17
3.2 RADIATED EMISSION MEASUREMENT	26
3.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT	26
3.2.2 TEST PROCEDURES	26
3.2.3 DEVIATION FROM TEST STANDARD	26
3.2.4 TEST SET UP	27
3.2.5 TEST RESULTS	29
4 INFORMATION ON THE TESTING LABORATORIES	49
5 MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB	50



RELEASE CONTROL RECORD

ISSUE NO.	DESCRIPTION	DATE ISSUED
W7L-P23070006RF07	Original release	Aug. 25, 2023

1 SUMMARY OF TEST RESULTS

47 CFR FCC PART 96		
FCC CLAUSE	TEST ITEM	RESULT
2.1046	Maximum Peak Output Power	See Note2
96.41(b)	Maximum EIRP	Compliance
2.1051	Conducted Band Edge	See Note2
96.41(e)		
2.1049	Occupied Bandwidth	See Note2
2.1055	Frequency Stability	See Note2
2.1051	Conducted Spurious Emissions	See Note2
96.41(e)		
2.1053	Radiated Spurious Emissions	Compliance See Note3
96.41(e)		
96.41(g)	Peak-to-Average Power Ratio	See Note2

Note:

1. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
2. Please refer to the module report FYCR220600021101 (FCC ID: XMR2022RM520NGL), but the data of EIRP is recalculated and showed in this report.
3. For Inter-CA band, the report only show the worst mode RSE data of original module report, because the antenna type of module and EUT is all the same, and the power of single LTE band is larger than that in CA, so single LTE band can cover the RSE risk of CA part.

1.1 MEASUREMENT 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
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 Output power	± 2.06dB

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. 28,23	Mar. 27,24
EXA Signal Analyzer	KEYSIGHT	N9010A-544	MY54510355	May.14,23	May.13,24
Loop Antenna	Schwarzbeck	FMZB 1519B	00173	Sep.03,22	Sep.02,23
Bilog Antenna	ETS-LINDGRE N	3143B	00161965	Feb. 18,23	Feb. 17,24
Horn Antenna	ETS-LINDGRE N	3117	00168692	Feb. 18,23	Feb. 17,24
Horn Antenna (18GHz-40GHz)	N/A	QWH-SL-18-40-K- SG/QMS-00361	15433	Sep.04, 22	Sep.03, 23
Radio Communication Analyzer	ANRITSU	MT8820C	6201465426	Feb. 14,23	Feb. 13,24
Signal Pre-Amplifier	EMSI	EMC 9135	980249	May. 06,23	May. 05,24
Signal Pre-Amplifier	EMSI	EMC 012645B	980257	May.12,23	May.11,24
Signal Pre-Amplifier	EMSI	EMC 184045B	980259	Feb. 17,23	Feb.16,24
3m Semi-anechoic Chamber	ETS-LINDGRE N	9m*6m*6m	Euroshieldpn- CT0001143-121 6	May. 19,23	May. 18,26
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. 06,23	May. 05,24
Power Meter	Anritsu	ML2495A	1506002	Feb. 14,23	Feb. 13,24
Power Sensor	Anritsu	MA2411B	1339352	Feb. 14,23	Feb. 13,24
Temperature Chamber	ESPEC	SH-242	93000855	May. 06,23	May. 05,24
MXG Analog Microvave Signal Generator	KEYSIGHT	N5183A	MY50143024	Feb. 14,23	Feb. 13,24
Base station R&S CMW500	Rohde&Schwa rz	CMW500	153085	May.12,23	May.11,24
DC Source	Kikusui/JP	PMX18-5A	N/A	Aug. 12,22	Aug. 11,23
DC Source	Kikusui/JP	PMX18-5A	N/A	Aug. 11,23	Aug. 10,24

- 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.



2 GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

PRODUCT	Cellular Backup Router	
BRAND NAME	DATAREMOTE	
MODEL NAME	90X1	
NOMINAL VOLTAGE	19Vdc (adapter or host equipment) 11.1Vdc (Li-ion, battery)	
MODULATION TECHNOLOGY	LTE	QPSK, 16QAM, 64QAM, 256QAM
FREQUENCY RANGE	LTE Band 48 Channel Bandwidth: 5MHz	3552.5MHz ~ 3697.5MHz
	LTE Band 48 Channel Bandwidth: 10MHz	3555MHz ~ 3695MHz
	LTE Band 48 Channel Bandwidth: 15MHz	3557.5MHz ~ 3692.5MHz
	LTE Band 48 Channel Bandwidth: 20MHz	3560MHz ~ 3690MHz
	LTE Band CA_48C Channel Bandwidth: 5MHz+20MHz	3553.3MHz ~ 3690MHz
	LTE Band CA_48C Channel Bandwidth: 20MHz +5MHz	3560MHz ~ 3696.7MHz
	LTE Band CA_48C Channel Bandwidth: 10MHz +20MHz	3555.5MHz ~ 3690MHz
	LTE Band CA_48C Channel Bandwidth: 20MHz +10MHz	3560MHz ~ 3694.5MHz
	LTE Band CA_48C Channel Bandwidth: 15MHz +20MHz	3557.8MHz ~ 3690MHz
	LTE Band CA_48C Channel Bandwidth: 20MHz +15MHz	3560MHz ~ 3692.2MHz
	LTE Band CA_48C Channel Bandwidth: 20MHz +20MHz	3560MHz ~ 3690MHz



EMISSION DESIGNATOR	LTE Band 48 Channel Bandwidth: 5MHz	QPSK: 4M59G7D
		16QAM: 4M58W7D
		64QAM: /
		256QAM: /
	LTE Band 48 Channel Bandwidth: 10MHz	QPSK: 9M12G7D
		16QAM: 9M10W7D
		64QAM: /
		256QAM: /
	LTE Band 48 Channel Bandwidth: 15MHz	QPSK: 13M7G7D
		16QAM: 13M6W7D
		64QAM: /
		256QAM: /
	LTE Band 48 Channel Bandwidth: 20MHz	QPSK: 18M1G7D
		16QAM: 18M1W7D
		64QAM: /
		256QAM: /
	LTE Band CA_48C Channel Bandwidth: 5MHz+20MHz	QPSK: 22M9G7D
		16QAM: 22M9W7D
		64QAM: 22M9W7D
		256QAM: 22M9W7D
	LTE Band CA_48C Channel Bandwidth: 20MHz +5MHz	QPSK: 23M0G7D
		16QAM: 22M9W7D
		64QAM: 22M9W7D
		256QAM: 22M9W7D
	LTE Band CA_48C Channel Bandwidth: 10MHz +20MHz	QPSK: 27M8G7D
		16QAM: 27M7W7D
		64QAM: 27M7W7D
		256QAM: 27M7W7D
	LTE Band CA_48C Channel Bandwidth: 20MHz +10MHz	QPSK: 27M8G7D
		16QAM: 27M8W7D
		64QAM: 27M8W7D
		256QAM: 27M7W7D
	LTE Band CA_48C Channel Bandwidth: 15MHz +20MHz	QPSK: 32M7G7D
		16QAM: 32M6W7D
		64QAM: 32M6W7D
		256QAM: 32M6W7D
	LTE Band CA_48C Channel Bandwidth: 20MHz +15MHz	QPSK: 32M7G7D
		16QAM: 32M6W7D
		64QAM: 32M6W7D
		256QAM: 32M6W7D
	LTE Band CA_48C Channel Bandwidth:	QPSK: 37M9G7D
		16QAM: 37M7W7D



	20MHz +20MHz	64QAM: 37M7W7D 256QAM: 37M8W7D
MAX. EIRP POWER	LTE Band 48 Channel Bandwidth: 5MHz	151.71mW
	LTE Band 48 Channel Bandwidth: 10MHz	164.44mW
	LTE Band 48 Channel Bandwidth: 15MHz	150.66mW
	LTE Band 48 Channel Bandwidth: 20MHz	127.06mW
	LTE Band CA_48C Channel Bandwidth: 5MHz+20MHz	86.10mW
	LTE Band CA_48C Channel Bandwidth: 20MHz +5MHz	85.51mW
	LTE Band CA_48C Channel Bandwidth: 10MHz +20MHz	86.50mW
	LTE Band CA_48C Channel Bandwidth: 20MHz +10MHz	86.30mW
	LTE Band CA_48C Channel Bandwidth: 15MHz +20MHz	86.90mW
	LTE Band CA_48C Channel Bandwidth: 20MHz +15MHz	87.30mW
	LTE Band CA_48C Channel Bandwidth: 20MHz +20MHz	87.50mW
ANTENNA GAIN	Monopole Antenna with -2.38dBi gain for LTE B48/ LTE CA 48C	
HW VERSION	1.0	
SW VERSION	1.0	
I/O PORTS	Refer to user's manual	
DATA CABLE	Ethernet Cable: non-shielded cable, with w/o ferrite core, 1.5 meter Phone Cable: non-shielded cable, with w/o ferrite core, 1.5 meter	
EXTREME TEMPERATURE	0-40 °C	
EXTREME VOLTAGE	3.6V - 24V	

**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 SISO function. Physically, the EUT provides one completed transmitter and one receiver.

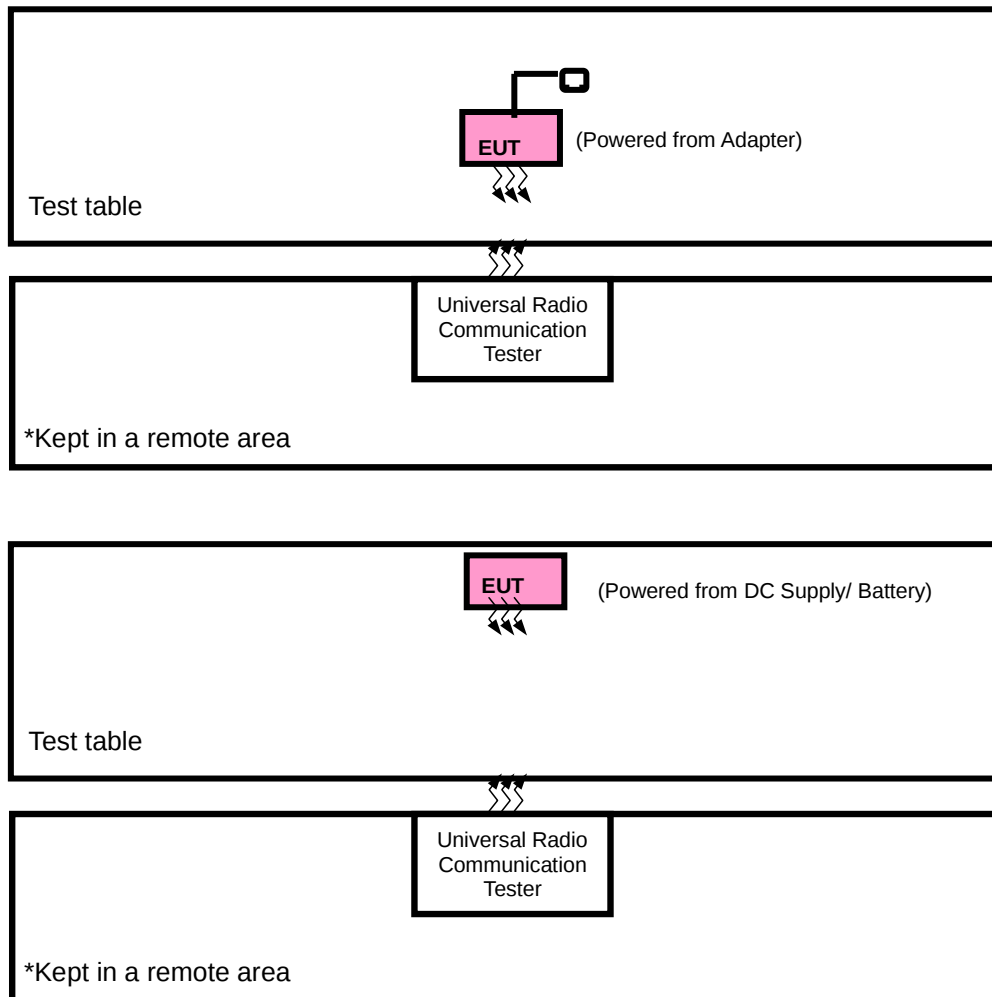
MODULATION MODE	TX FUNCTION
LTE	1TX/1RX

3. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.

List of Accessory:

ACCESSORIES	MANUFACTURER	MODEL	SPECIFICATION
AC Adapter	Moso Power Supply Technology Co., Ltd.	MS-V3420R190-0 65L0-US	I/P: 100-240Vac, 1.5A, O/P: 19Vdc, 3.42A
Battery	EVE ENERGY CO., LTD.	DRI18650-3S6P	Capacity: 10.8Vdc, 15300mAh
Ethernet Cable	Wujiang Eksong Electronics Co., LTD.	HQ01-C727	Signal Line,1.5meter
Phone Cable	Wujiang Eksong Electronics Co., LTD.	HQ01-C697	Signal Line,1.5meter

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 LTE link
B	EUT + DC Supply with LTE link

LTE BAND 48 MODE

EUT CONFIGUR E MODE	TEST ITEM	AVAILABL E CHANNEL	TESTED CHANNEL	CHANNEL BANDWID TH	MODULATION	MODE
A	EIRP	55265 to 56715	55265, 55990, 56715	5MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		55290 to 56690	55290, 55990, 56690	10MHz	QPSK, 16QAM	1 RB / 0RB Offset
		55315 to 56665	55315, 55990, 56665	15MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		55340 to 56640	55340, 55990, 56640	20MHz	QPSK, 16QAM	1 RB / 0 RB Offset
A	RADIATED EMISSION	55265 to 56715	55990	5MHz	QPSK	1 RB / 0 RB Offset
		55290 to 56690	55990	10MHz	QPSK	1 RB / 0RB Offset
		55315 to 56665	55315, 55990, 56665	15MHz	QPSK	1 RB / 0 RB Offset
		55340 to 56640	55990	20MHz	QPSK	1 RB / 0 RB Offset

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

LTE BAND CA_48C MODE

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE PCC CHANNEL	AVAILABLE SCC CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE(PCC)	MODE(SCC)
A	EIRP	55340 to 56491	55511 to 56662	Low, Middle, High	20MHz+15MHz	QPSK, 16QAM, 64QAM, 256QAM	1RB/ 99RB Offset	1RB/ 0RB Offset
		55318 to 56496	55489 to 56640	Low, Middle, High	15MHz+20MHz	QPSK, 16QAM, 64QAM, 256QAM	1RB/ 74RB Offset	1RB/ 0RB Offset
		55340 to 56541	55484 to 56685	Low, Middle, High	20MHz+10MHz	QPSK, 16QAM, 64QAM, 256QAM	1RB/ 99RB Offset	1RB/ 0RB Offset
		55295 to 56496	55439 to 56640	Low, Middle, High	10MHz+20MHz	QPSK, 16QAM, 64QAM, 256QAM	1RB/ 49RB Offset	1RB/ 0RB Offset
		55340 to 56590	55457 to 56707	Low, Middle, High	20MHz +5MHz	QPSK, 16QAM, 64QAM, 256QAM	1RB/ 99RB Offset	1RB/ 0RB Offset
		55273 to 56523	55390 to 56640	Low, Middle, High	5MHz +20MHz	QPSK, 16QAM, 64QAM, 256QAM	1RB / 24RB Offset	1RB / 0RB Offset
		55340 to 56442	55538 to 56640	Low, Middle, High	20MHz +20MHz	QPSK, 16QAM, 64QAM, 256QAM	1RB/ 99RB Offset	1RB/ 0RB Offset
A	RADIATED EMISSION	55340 to 56442	55538 to 56640	Low, Middle, High	20MHz +20MHz	QPSK	1RB/ 99RB Offset	1RB/ 0RB Offset

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



Test Report No.: W7L-P23070006RF07

TEST CONDITION:

TEST ITEM	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
ERP&EIRP	23deg. C, 70%RH	DC 19V By Adapter	Jace Hu
RADIATED EMISSION	23deg. C, 70%RH	DC19V By Adapter	Jace Hu

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 96

KDB 971168 D02 Power Meas License Digital Systems v02r02

ANSI/TIA/EIA-603-E 2016

ANSI 63.26-2015

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

3 TEST TYPES AND RESULTS

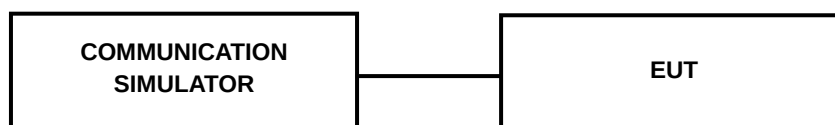
3.1 MAXIMUM EIRP MEASUREMENT

3.1.1 LIMITS OF MAXIMUM EIRP MEASUREMENT

Device	Maximum EIRP (dBm/10 MHz)
End User Device	23
Category A CBSD	30
Category B CBSD	47

3.1.2 TEST SETUP

CONDUCTED POWER MEASUREMENT:



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



3.1.3 TEST PROCEDURES

EIRP 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 determining the ERP or EIRP from the conducted RF output power measured using the guidance provided above is:

$$\text{ERP or EIRP} = P_{\text{Meas}} + G_{\text{T}} - L_{\text{C}}$$

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.

3.1.4 DEVIATION FROM TEST STANDARD

No deviation.

3.1.5 TEST RESULTS

EIRP

LTE Band 48

CHANNEL BANDWIDTH: 5MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
55265	3552.5	23.77	-2.38	21.39	137.72	23
55990	3625	24.19	-2.38	21.81	151.71	23
56715	3697.5	24.14	-2.38	21.76	149.97	23

CHANNEL BANDWIDTH: 5MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
55265	3552.5	22.47	-2.38	20.09	102.09	23
55990	3625	22.87	-2.38	20.49	111.94	23
56715	3697.5	23.5	-2.38	21.12	129.42	23

CHANNEL BANDWIDTH: 10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
55290	3555	23.51	-2.38	21.13	129.72	23
55990	3625	23.78	-2.38	21.4	138.04	23
56690	3695	24.54	-2.38	22.16	164.44	23

CHANNEL BANDWIDTH: 10MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
55290	3555	22.51	-2.38	20.13	103.04	23
55990	3625	23.19	-2.38	20.81	120.5	23
56690	3695	23.4	-2.38	21.02	126.47	23

CHANNEL BANDWIDTH: 15MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
55315	3557.5	23.25	-2.38	20.87	122.18	23
55990	3625	23.35	-2.38	20.97	125.03	23
56665	3692.5	24.16	-2.38	21.78	150.66	23

CHANNEL BANDWIDTH: 15MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
55315	3557.5	22.54	-2.38	20.16	103.75	23
55990	3625	22.77	-2.38	20.39	109.4	23
56665	3692.5	23.02	-2.38	20.64	115.88	23

CHANNEL BANDWIDTH: 20MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
55340	3560	23.37	-2.38	20.99	125.6	23
55990	3625	21.38	-2.38	19	79.43	23
56640	3690	22.02	-2.38	19.64	92.04	23

CHANNEL BANDWIDTH: 20MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
55340	3560	22.44	-2.38	20.06	101.39	23
55990	3625	20.68	-2.38	18.3	67.61	23
56640	3690	23.42	-2.38	21.04	127.06	23



LTE BAND CA_48C

LTE BAND CA_48C 5M+20M QPSK								
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
55273	3553.3	55390	3565.0	21.59	-2.38	19.21	83.37	23
55898	3615.8	56015	3627.5	21.72	-2.38	19.34	85.90	23
56523	3678.3	56640	3690.0	21.73	-2.38	19.35	86.10	23
LTE BAND CA_48C 5M+20M 16QAM								
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
55273	3553.3	55390	3565.0	20.74	-2.38	18.36	68.55	23
55898	3615.8	56015	3627.5	20.83	-2.38	18.45	69.98	23
56523	3678.3	56640	3690.0	20.81	-2.38	18.43	69.66	23
LTE BAND CA_48C 5M+20M 64QAM								
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
55273	3553.3	55390	3565.0	19.74	-2.38	17.36	54.45	23
55898	3615.8	56015	3627.5	19.83	-2.38	17.45	55.59	23
56523	3678.3	56640	3690.0	19.92	-2.38	17.54	56.75	23
LTE BAND CA_48C 5M+20M 256QAM								
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
55273	3553.3	55390	3565.0	17.47	-2.38	15.09	32.28	23
55898	3615.8	56015	3627.5	17.53	-2.38	15.15	32.73	23
56523	3678.3	56640	3690.0	17.47	-2.38	15.09	32.28	23



LTE BAND CA_48C 20M+5M QPSK								
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
55340	3560.0	55457	3571.7	21.70	-2.38	19.32	85.51	23
55965	3622.5	56082	3634.2	21.59	-2.38	19.21	83.37	23
56590	3685.0	56707	3696.7	21.68	-2.38	19.30	85.11	23
LTE BAND CA_48C 20M+5M 16QAM								
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
55340	3560.0	55457	3571.7	20.73	-2.38	18.35	68.39	23
55965	3622.5	56082	3634.2	20.63	-2.38	18.25	66.83	23
56590	3685.0	56707	3696.7	20.63	-2.38	18.25	66.83	23
LTE BAND CA_48C 20M+5M 64QAM								
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
55340	3560.0	55457	3571.7	19.77	-2.38	17.39	54.83	23
55965	3622.5	56082	3634.2	19.78	-2.38	17.40	54.95	23
56590	3685.0	56707	3696.7	19.77	-2.38	17.39	54.83	23
LTE BAND CA_48C 20M+5M 256QAM								
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
55340	3560.0	55457	3571.7	17.48	-2.38	15.10	32.36	23
55965	3622.5	56082	3634.2	17.48	-2.38	15.10	32.36	23
56590	3685.0	56707	3696.7	17.45	-2.38	15.07	32.14	23

LTE BAND CA_48C 10M+20M QPSK								
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
55295	3555.5	55439	3569.9	21.65	-2.38	19.27	84.53	23
55896	3615.6	56040	3630.0	21.75	-2.38	19.37	86.50	23
56496	3675.6	56640	3690.0	21.74	-2.38	19.36	86.30	23
LTE BAND CA_48C 10M+20M 16QAM								
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
55295	3555.5	55439	3569.9	20.70	-2.38	18.32	67.92	23
55896	3615.6	56040	3630.0	20.76	-2.38	18.38	68.87	23
56496	3675.6	56640	3690.0	20.74	-2.38	18.36	68.55	23
LTE BAND CA_48C 10M+20M 64QAM								
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
55295	3555.5	55439	3569.9	19.79	-2.38	17.41	55.08	23
55896	3615.6	56040	3630.0	19.93	-2.38	17.55	56.89	23
56496	3675.6	56640	3690.0	19.77	-2.38	17.39	54.83	23
LTE BAND CA_48C 10M+20M 256QAM								
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
55295	3555.5	55439	3569.9	17.48	-2.38	15.10	32.36	23
55896	3615.6	56040	3630.0	17.54	-2.38	15.16	32.81	23
56496	3675.6	56640	3690.0	17.52	-2.38	15.14	32.66	23



LTE BAND CA_48C 20M+10M QPSK								
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
55340	3560.0	55484	3574.4	21.66	-2.38	19.28	84.72	23
55941	3620.1	56085	3634.5	21.64	-2.38	19.26	84.33	23
56541	3680.1	56685	3694.5	21.74	-2.38	19.36	86.30	23
LTE BAND CA_48C 20M+10M 16QAM								
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
55340	3560.0	55484	3574.4	20.64	-2.38	18.26	66.99	23
55941	3620.1	56085	3634.5	20.68	-2.38	18.30	67.61	23
56541	3680.1	56685	3694.5	20.72	-2.38	18.34	68.23	23
LTE BAND CA_48C 20M+10M 64QAM								
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
55340	3560.0	55484	3574.4	19.86	-2.38	17.48	55.98	23
55941	3620.1	56085	3634.5	19.92	-2.38	17.54	56.75	23
56541	3680.1	56685	3694.5	19.82	-2.38	17.44	55.46	23
LTE BAND CA_48C 20M+10M 256QAM								
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
55340	3560.0	55484	3574.4	17.56	-2.38	15.18	32.96	23
55941	3620.1	56085	3634.5	17.58	-2.38	15.20	33.11	23
56541	3680.1	56685	3694.5	17.56	-2.38	15.18	32.96	23

LTE BAND CA_48C 15M+20M QPSK								
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
55318	3557.8	55489	3574.9	21.64	-2.38	19.26	84.33	23
55893	3615.3	55064	3632.4	21.77	-2.38	19.39	86.90	23
56496	3672.9	56640	3690.0	21.72	-2.38	19.34	85.90	23
LTE BAND CA_48C 15M+20M 16QAM								
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
55318	3557.8	55489	3574.9	20.54	-2.38	18.16	65.46	23
55893	3615.3	55064	3632.4	20.77	-2.38	18.39	69.02	23
56496	3672.9	56640	3690.0	20.72	-2.38	18.34	68.23	23
LTE BAND CA_48C 15M+20M 64QAM								
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
55318	3557.8	55489	3574.9	19.83	-2.38	17.45	55.59	23
55893	3615.3	55064	3632.4	19.98	-2.38	17.60	57.54	23
56496	3672.9	56640	3690.0	19.88	-2.38	17.50	56.23	23
LTE BAND CA_48C 15M+20M 256QAM								
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
55318	3557.8	55489	3574.9	17.64	-2.38	15.26	33.57	23
55893	3615.3	55064	3632.4	17.69	-2.38	15.31	33.96	23
56496	3672.9	56640	3690.0	17.63	-2.38	15.25	33.50	23

LTE BAND CA_48C 20M+15M QPSK								
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
55340	3560.0	55511	3577.1	21.79	-2.38	19.41	87.30	23
55916	3617.6	56087	3634.7	21.79	-2.38	19.41	87.30	23
56491	3675.1	56662	3692.2	21.71	-2.38	19.33	85.70	23
LTE BAND CA_48C 20M+15M 16QAM								
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
55340	3560.0	55511	3577.1	20.92	-2.38	18.54	71.45	23
55916	3617.6	56087	3634.7	20.78	-2.38	18.40	69.18	23
56491	3675.1	56662	3692.2	20.72	-2.38	18.34	68.23	23
LTE BAND CA_48C 20M+15M 64QAM								
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
55340	3560.0	55511	3577.1	19.88	-2.38	17.50	56.23	23
55916	3617.6	56087	3634.7	20.00	-2.38	17.62	57.81	23
56491	3675.1	56662	3692.2	19.83	-2.38	17.45	55.59	23
LTE BAND CA_48C 20M+15M 256QAM								
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
55340	3560.0	55511	3577.1	17.67	-2.38	15.29	33.81	23
55916	3617.6	56087	3634.7	17.64	-2.38	15.26	33.57	23
56491	3675.1	56662	3692.2	17.63	-2.38	15.25	33.50	23



LTE BAND CA_48C 20M+20M QPSK								
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
55340	3560.0	55538	3579.8	21.80	-2.38	19.42	87.50	23
55891	3615.1	56089	3634.9	21.73	-2.38	19.35	86.10	23
56442	3670.2	56640	3690.0	21.77	-2.38	19.39	86.90	23
LTE BAND CA_48C 20M+20M 16QAM								
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
55340	3560.0	55538	3579.8	20.77	-2.38	18.39	69.02	23
55891	3615.1	56089	3634.9	20.71	-2.38	18.33	68.08	23
56442	3670.2	56640	3690.0	20.86	-2.38	18.48	70.47	23
LTE BAND CA_48C 20M+20M 64QAM								
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
55340	3560.0	55538	3579.8	19.91	-2.38	17.53	56.62	23
55891	3615.1	56089	3634.9	19.96	-2.38	17.58	57.28	23
56442	3670.2	56640	3690.0	19.86	-2.38	17.48	55.98	23
LTE BAND CA_48C 20M+20M 256QAM								
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10MHz)
55340	3560.0	55538	3579.8	17.66	-2.38	15.28	33.73	23
55891	3615.1	56089	3634.9	17.69	-2.38	15.31	33.96	23
56442	3670.2	56640	3690.0	17.63	-2.38	15.25	33.50	23

3.2 RADIATED EMISSION MEASUREMENT

3.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

The power of any emissions below 3530 MHz or above 3720 MHz shall not exceed -40dBm/MHz.

3.2.2 TEST PROCEDURES

- a. Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8m(below or equal 1GHz) and/or 1.5m(above 1GHz) 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 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. $EIRP = \text{Output power level of S.G} - \text{TX cable loss} + \text{Antenna gain of substitution horn}.$
- d. E.R.P power can be calculated form E.I.R.P power by subtracting the gain of dipole,
 $E.R.P \text{ power} = E.I.P.R \text{ power} - 2.15\text{dBi}.$

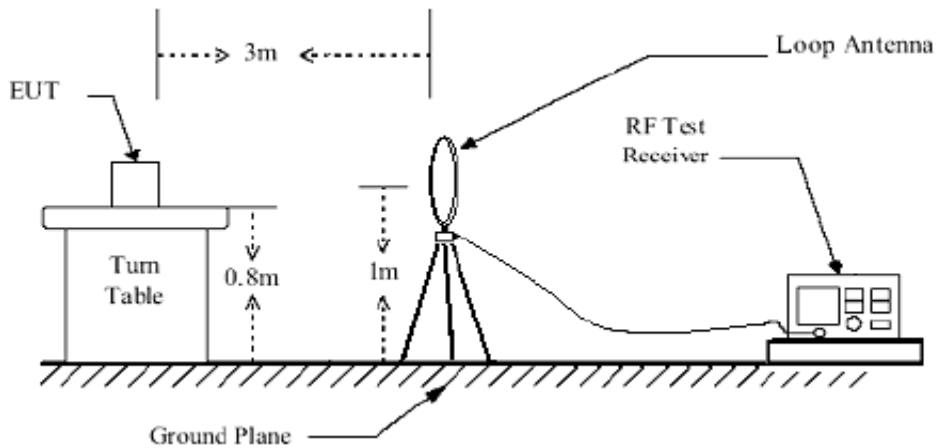
Note: The resolution bandwidth of spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz.

3.2.3 DEVIATION FROM TEST STANDARD

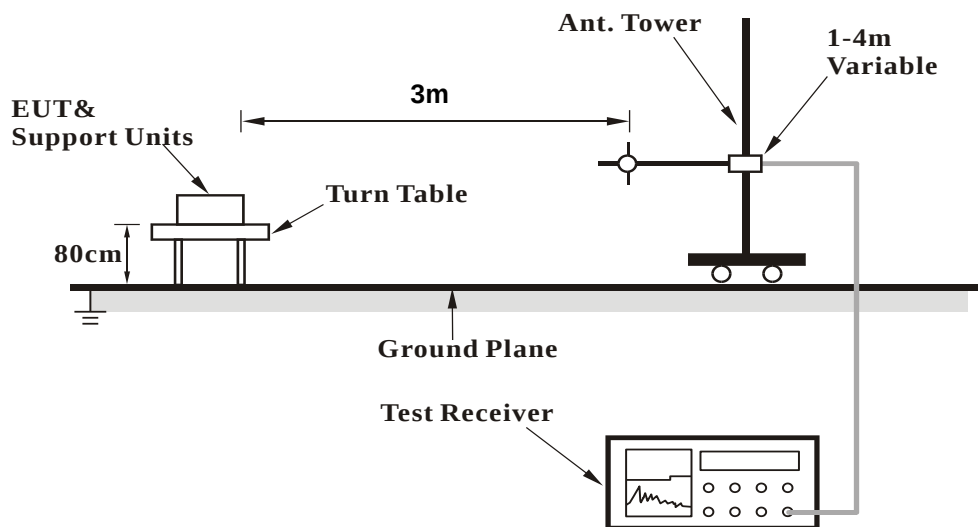
No deviation.

3.2.4 TEST SET UP

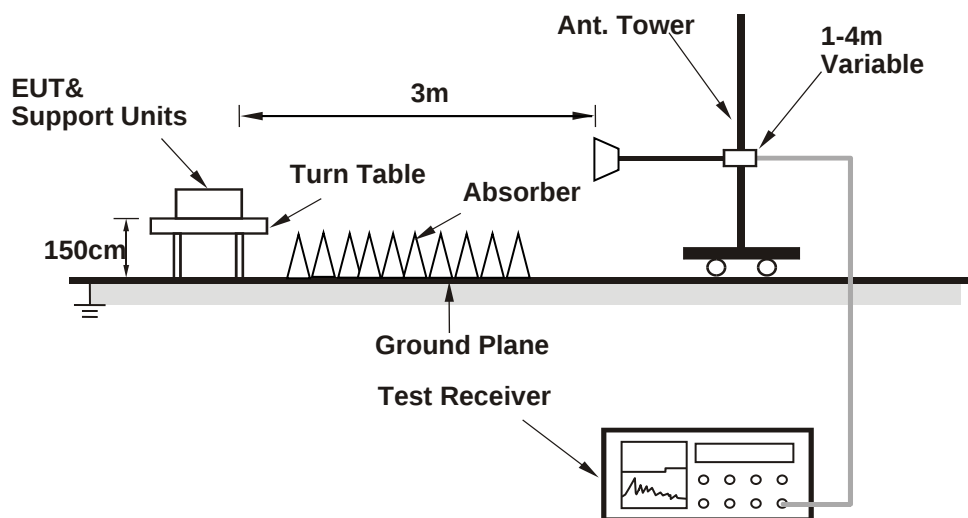
< Frequency Range below 30MHz >



<Frequency Range below 1GHz>



<Frequency Range above 1GHz>



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

3.2.5 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.

BELOW 1GHz WORST-CASE DATA

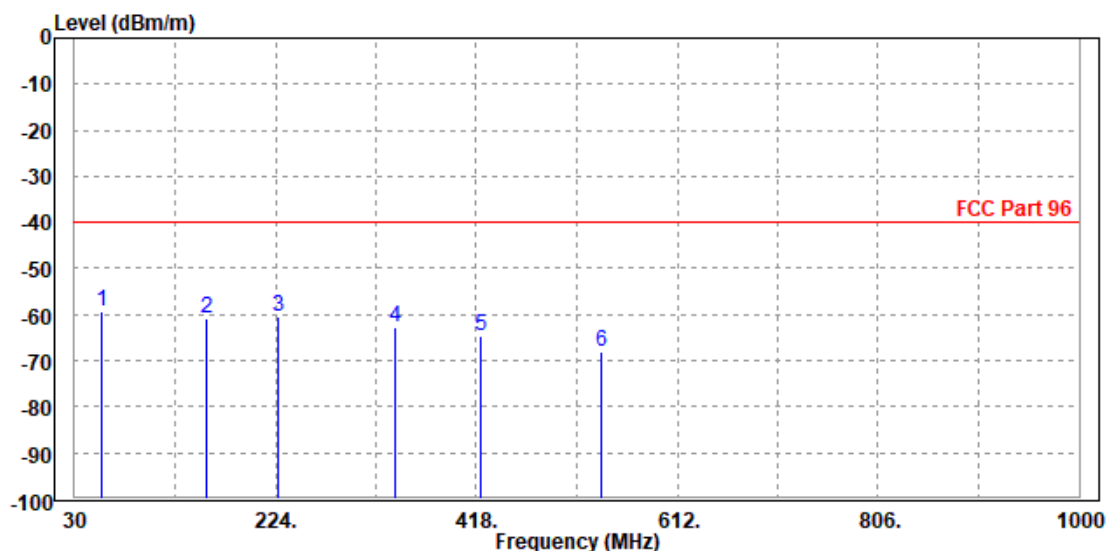
30 MHz – 1GHz data:

LTE Band 48

CHANNEL BANDWIDTH: 15MHz / QPSK

MODE	TX channel 55990	FREQUENCY RANGE	Below 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

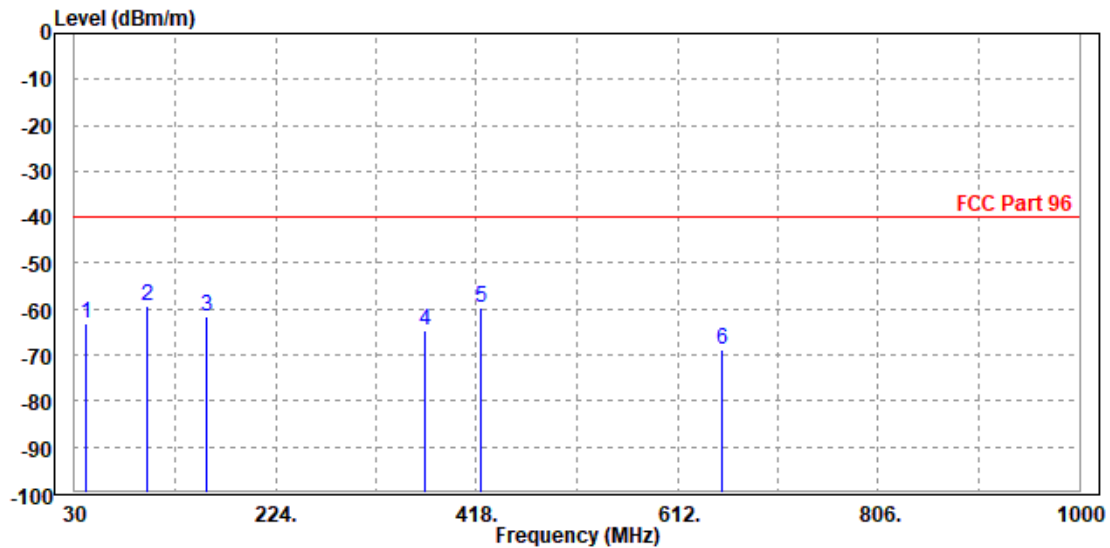
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1 PP	56.190	-59.40	-41.32	-40.00	-19.40	-18.08	Peak	Horizontal
2	158.040	-60.87	-44.39	-40.00	-20.87	-16.48	Peak	Horizontal
3	226.910	-60.50	-46.29	-40.00	-20.50	-14.21	Peak	Horizontal
4	339.430	-62.74	-51.24	-40.00	-22.74	-11.50	Peak	Horizontal
5	422.850	-64.59	-54.97	-40.00	-24.59	-9.62	Peak	Horizontal
6	539.250	-67.99	-61.39	-40.00	-27.99	-6.60	Peak	Horizontal





MODE	TX channel 55990	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	40.670	-63.12	-38.20	-40.00	-23.12	-24.92	Peak	Vertical
2 PP	99.840	-59.14	-52.63	-40.00	-19.14	-6.51	Peak	Vertical
3	158.040	-61.71	-44.63	-40.00	-21.71	-17.08	Peak	Vertical
4	367.560	-64.73	-55.14	-40.00	-24.73	-9.59	Peak	Vertical
5	421.880	-59.68	-50.88	-40.00	-19.68	-8.80	Peak	Vertical
6	655.650	-68.96	-63.29	-40.00	-28.96	-5.67	Peak	Vertical





ABOVE 1GHz

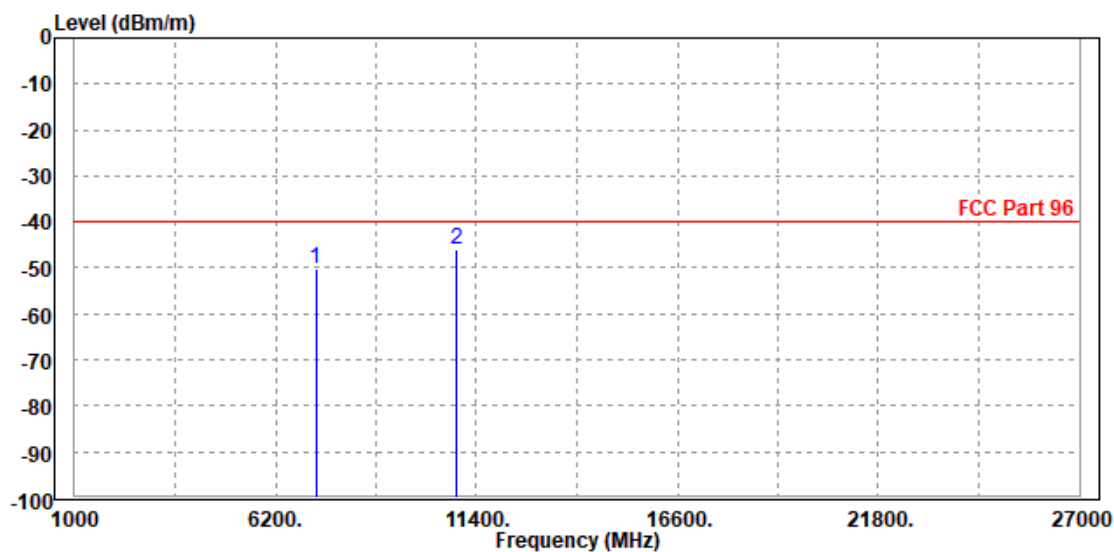
Note: For frequency above 18GHz, the emission was tested 20db below the limit so the data not recorded in the sheet.

LTE BAND 48

CHANNEL BANDWIDTH: 5MHz / QPSK

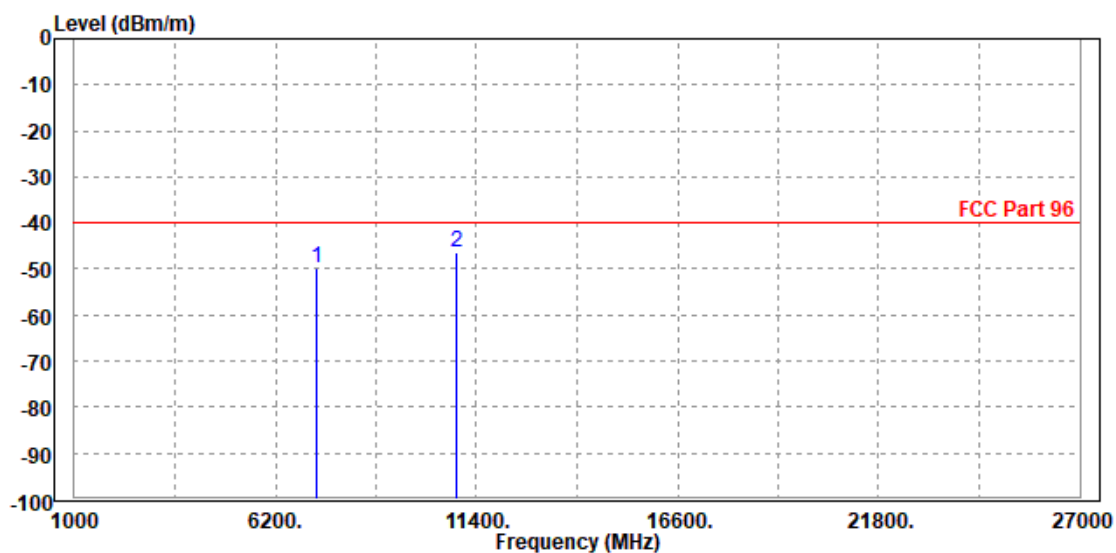
MODE	TX channel 55990	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60Hz
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	7240.000	-50.38	-62.22	-40.00	-10.38	11.84	Peak	Horizontal
2	PP10880.000	-46.19	-65.82	-40.00	-6.19	19.63	Peak	Horizontal



MODE	TX channel 55990	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			

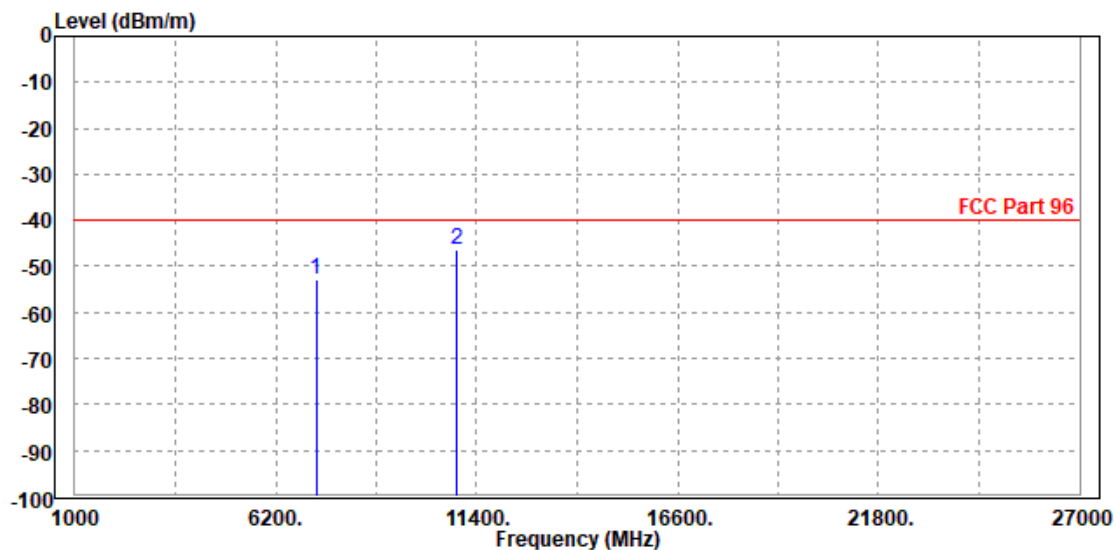
	Freq	Level	Read Level	Limit	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	7250.000	-49.67	-63.38	-40.00	-9.67	13.71	Peak	Vertical
2	PP10880.000	-46.44	-66.13	-40.00	-6.44	19.69	Peak	Vertical



CHANNEL BANDWIDTH: 10MHz / QPSK

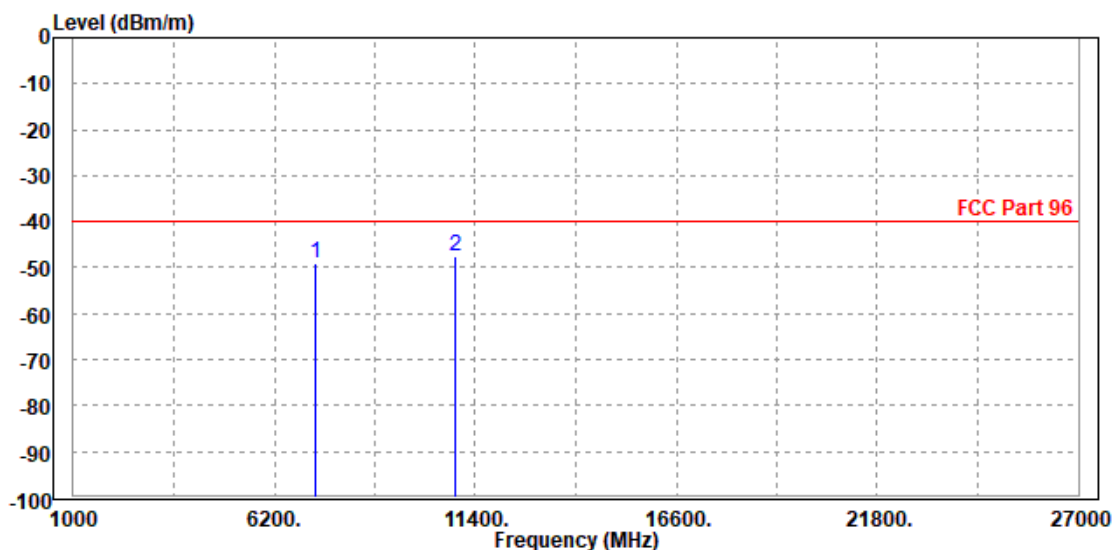
MODE	TX channel 55990	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60Hz
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	7240.000	-52.83	-64.67	-40.00	-12.83	11.84	Peak	Horizontal
2	PP10875.000	-46.33	-65.94	-40.00	-6.33	19.61	Peak	Horizontal



MODE	TX channel 55990	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	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	7250.000	-48.96	-62.67	-40.00	-8.96	13.71	Peak	Vertical
2	PP10880.000	-47.44	-67.13	-40.00	-7.44	19.69	Peak	Vertical

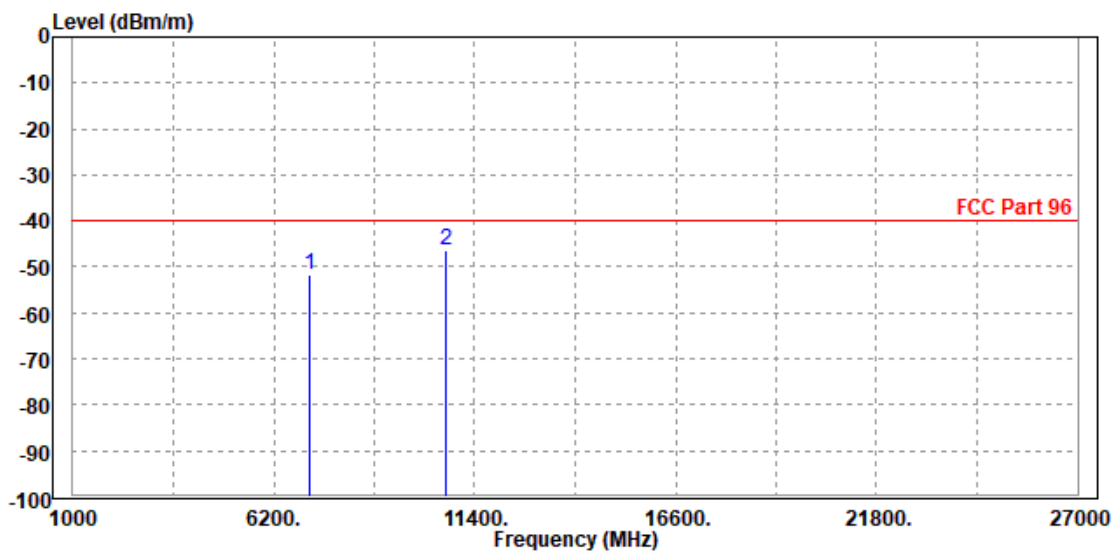


CHANNEL BANDWIDTH: 15MHz / QPSK

CH55315

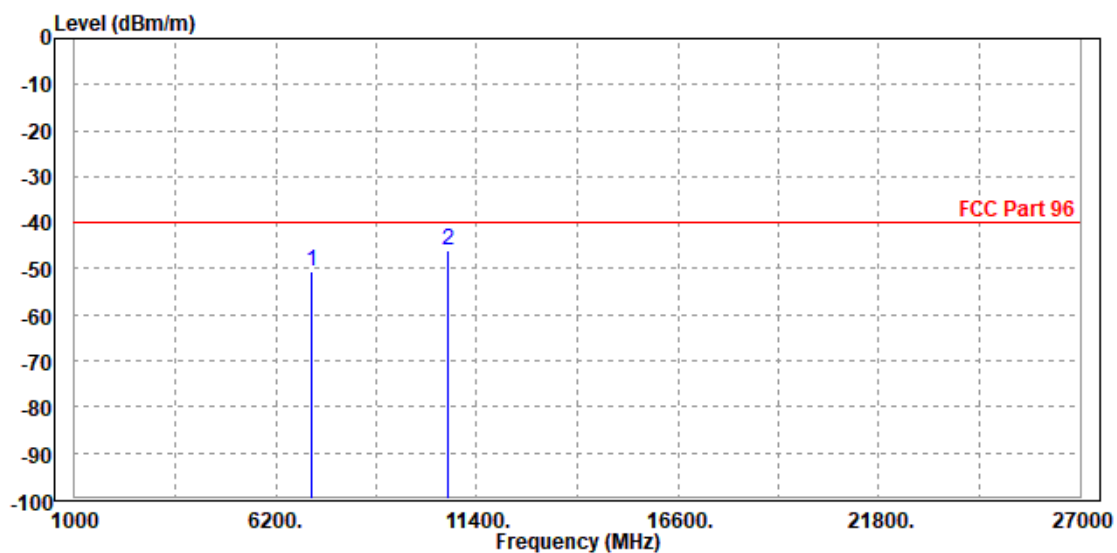
MODE	TX channel 55315	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60Hz
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	7110.000	-51.64	-63.69	-40.00	-11.64	12.05	Peak	Horizontal
2	PP10672.000	-46.45	-65.51	-40.00	-6.45	19.06	Peak	Horizontal



MODE	TX channel 55315	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	7115.000	-50.59	-63.77	-40.00	-10.59	13.18	Peak	Vertical
2	PP10672.000	-45.91	-64.63	-40.00	-5.91	18.72	Peak	Vertical

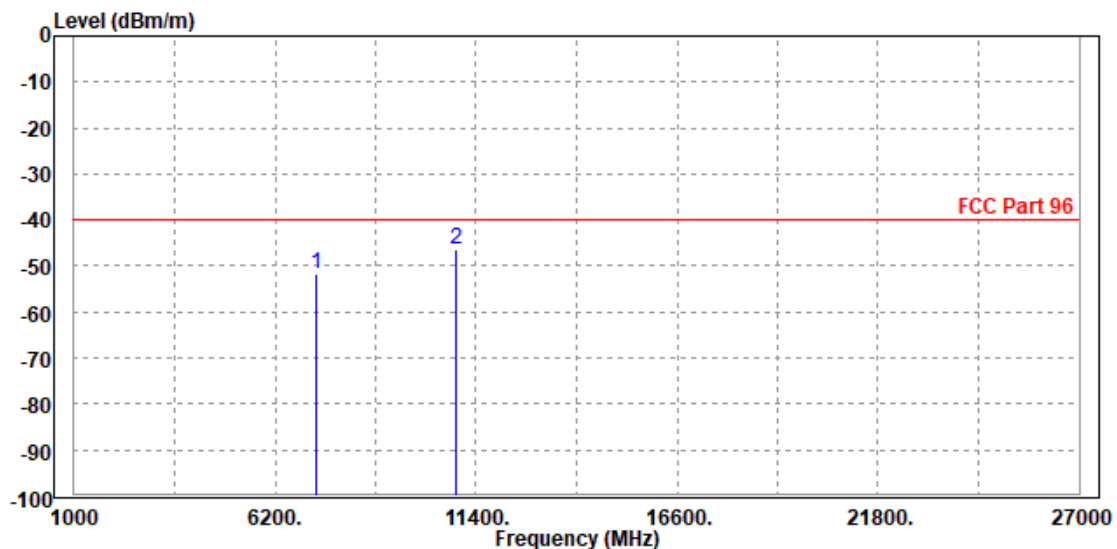




CH55990

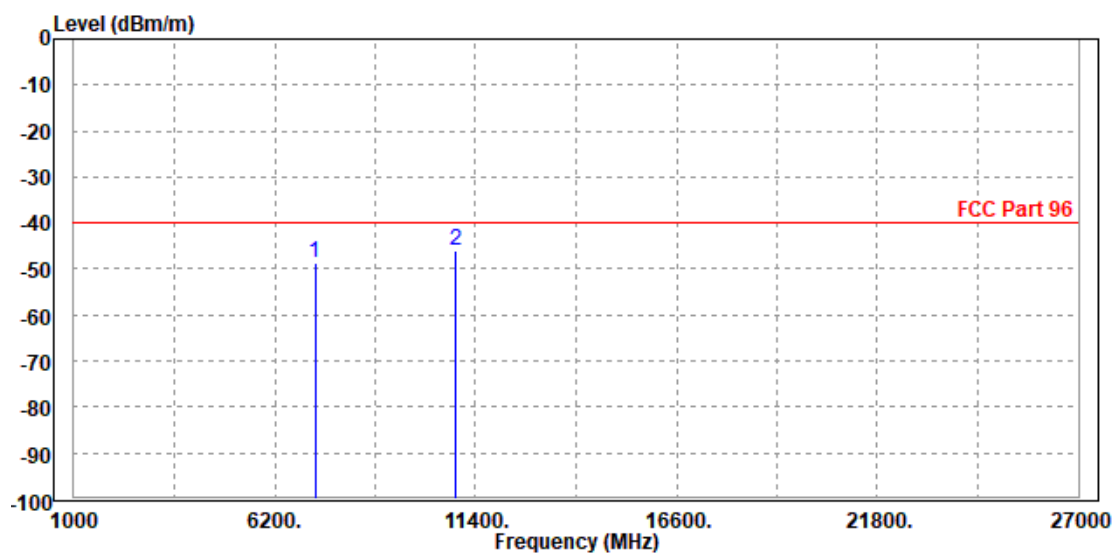
MODE	TX channel 55990	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60Hz
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	7250.000	-51.65	-63.47	-40.00	-11.65	11.82	Peak	Horizontal
2	PP10880.000	-46.37	-66.00	-40.00	-6.37	19.63	Peak	Horizontal



MODE	TX channel 55990	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	7240.000	-48.82	-62.49	-40.00	-8.82	13.67	Peak	Vertical
2	PP10880.000	-45.90	-65.59	-40.00	-5.90	19.69	Peak	Vertical

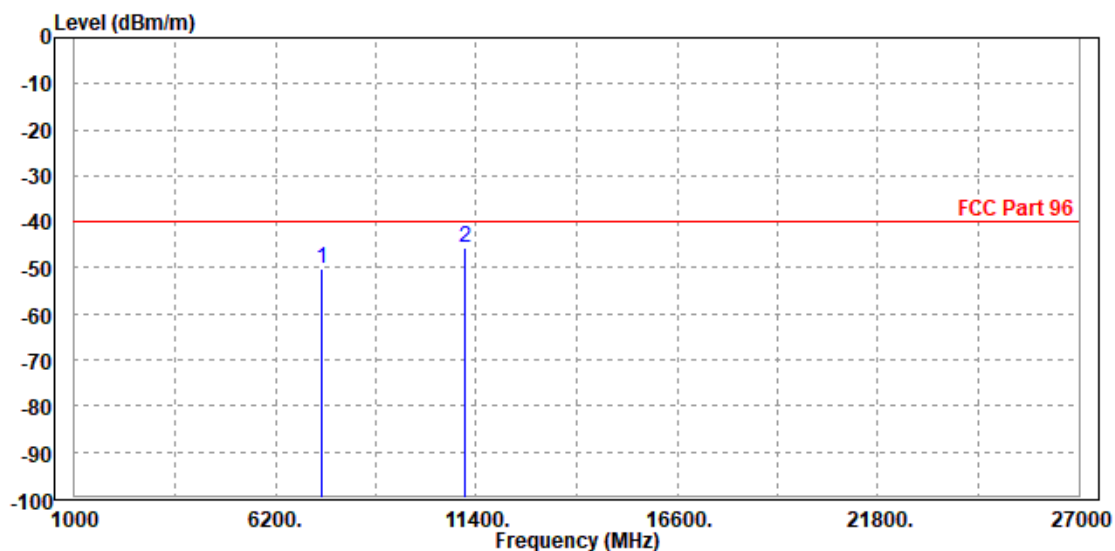




CH56665

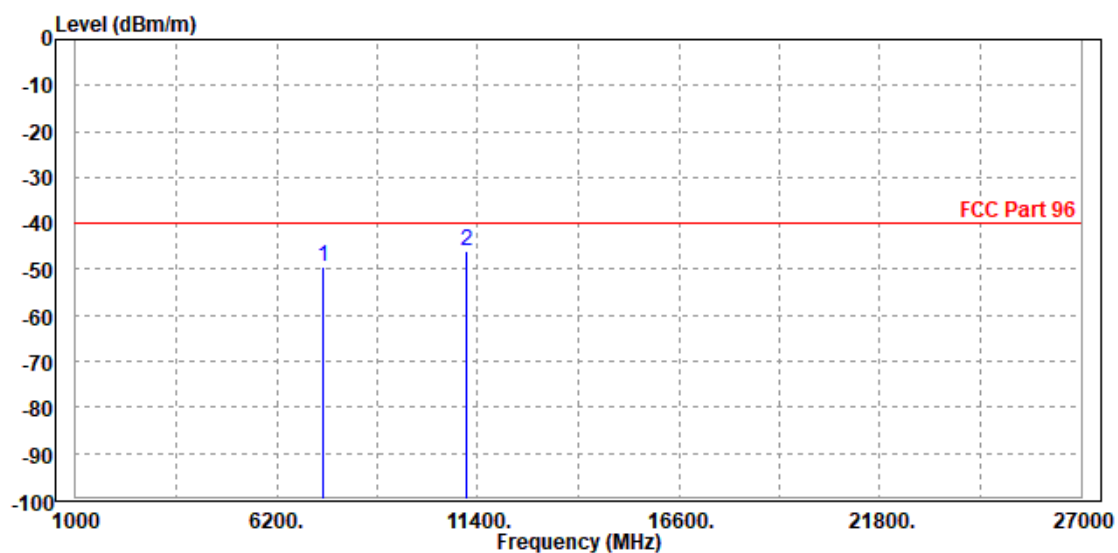
MODE	TX channel 56665	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60Hz
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	7385.000	-50.05	-61.65	-40.00	-10.05	11.60	Peak	Horizontal
2	PP11088.000	-45.53	-65.60	-40.00	-5.53	20.07	Peak	Horizontal



MODE	TX channel 56665	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			

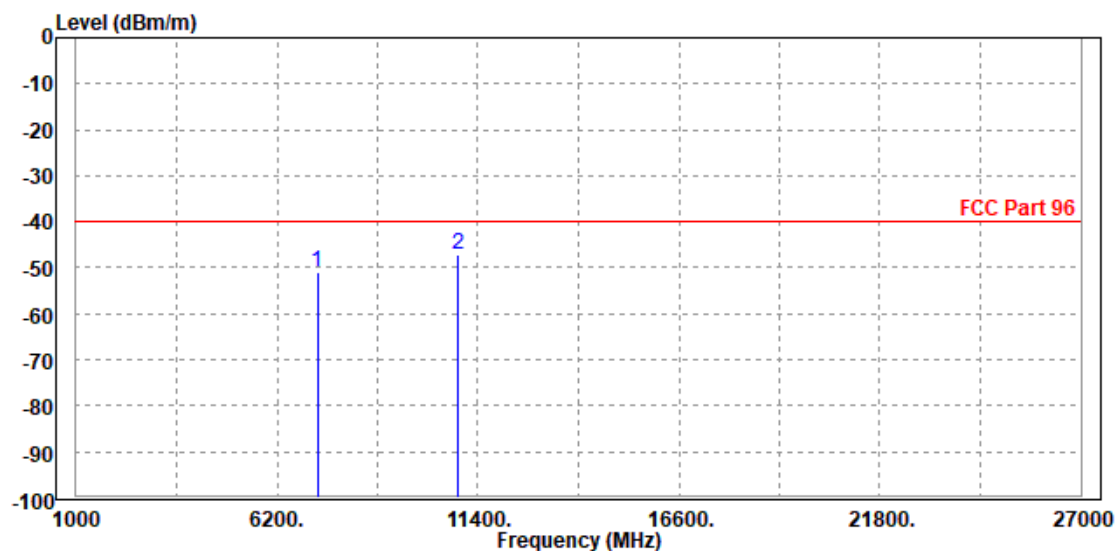
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	7396.000	-49.33	-63.62	-40.00	-9.33	14.29	Peak	Vertical
2	PP11088.000	-46.02	-65.80	-40.00	-6.02	19.78	Peak	Vertical



CHANNEL BANDWIDTH: 20MHz / QPSK

MODE	TX channel 55990	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			

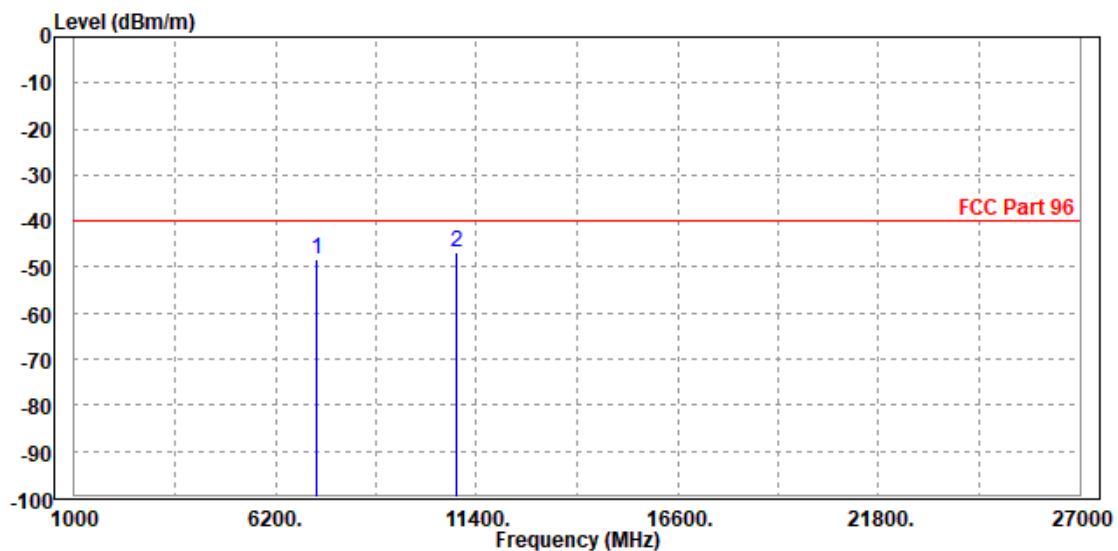
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	7240.000	-50.78	-62.62	-40.00	-10.78	11.84	Peak	Horizontal
2	PP10880.000	-47.31	-66.94	-40.00	-7.31	19.63	Peak	Horizontal





MODE	TX channel 55990	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	7250.000	-48.48	-62.19	-40.00	-8.48	13.71	Peak	Vertical
2	PP10880.000	-46.75	-66.44	-40.00	-6.75	19.69	Peak	Vertical





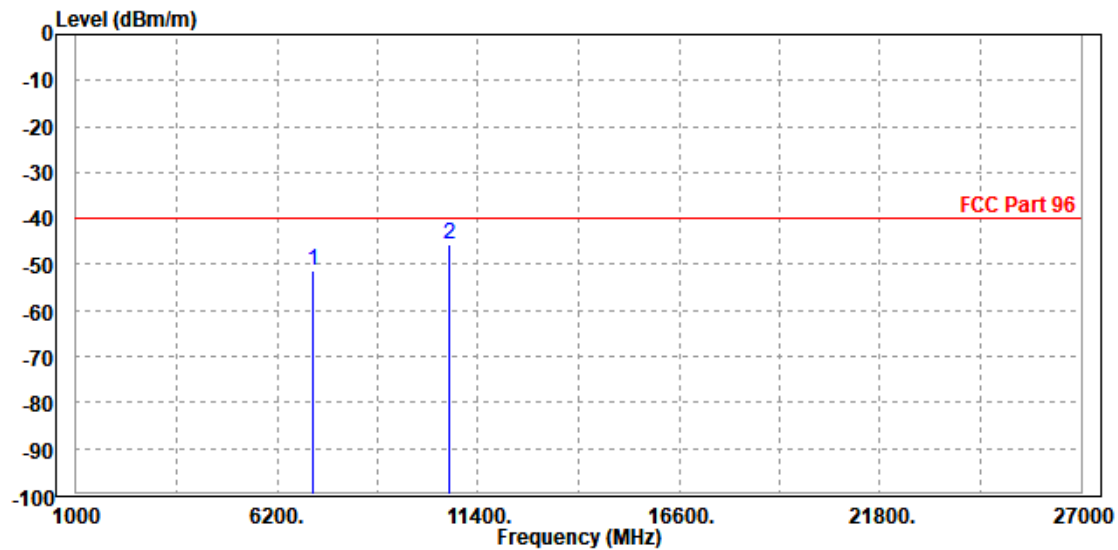
LTE Band CA _48C

CHANNEL BANDWIDTH: 20MHz + 20MHz

CH 55340 /55538

MODE	55340 /55538	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			

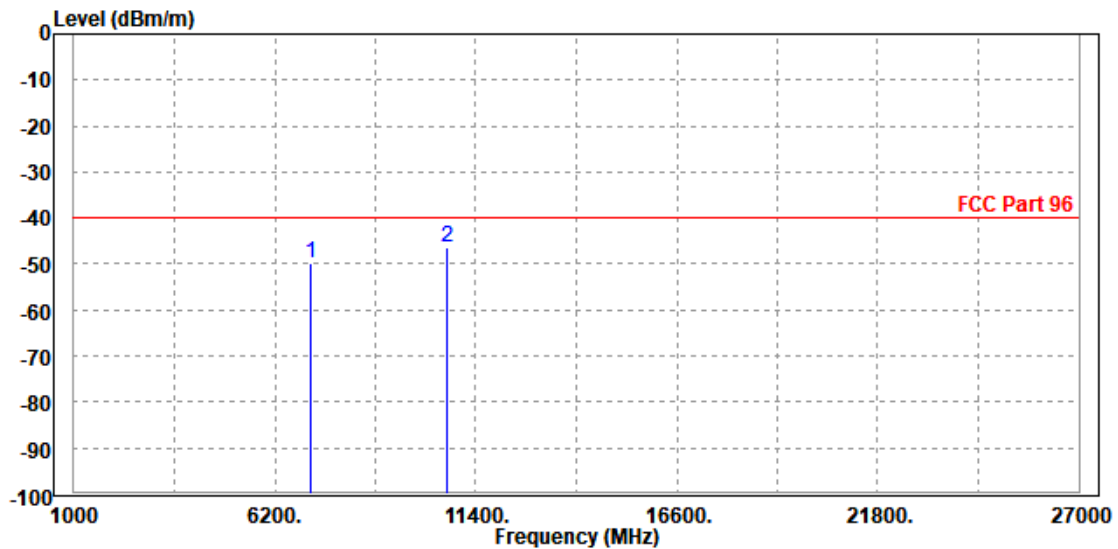
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	7110.000	-51.15	-63.20	-40.00	-11.15	12.05	Peak	Horizontal
2	PP10672.000	-45.79	-64.85	-40.00	-5.79	19.06	Peak	Horizontal





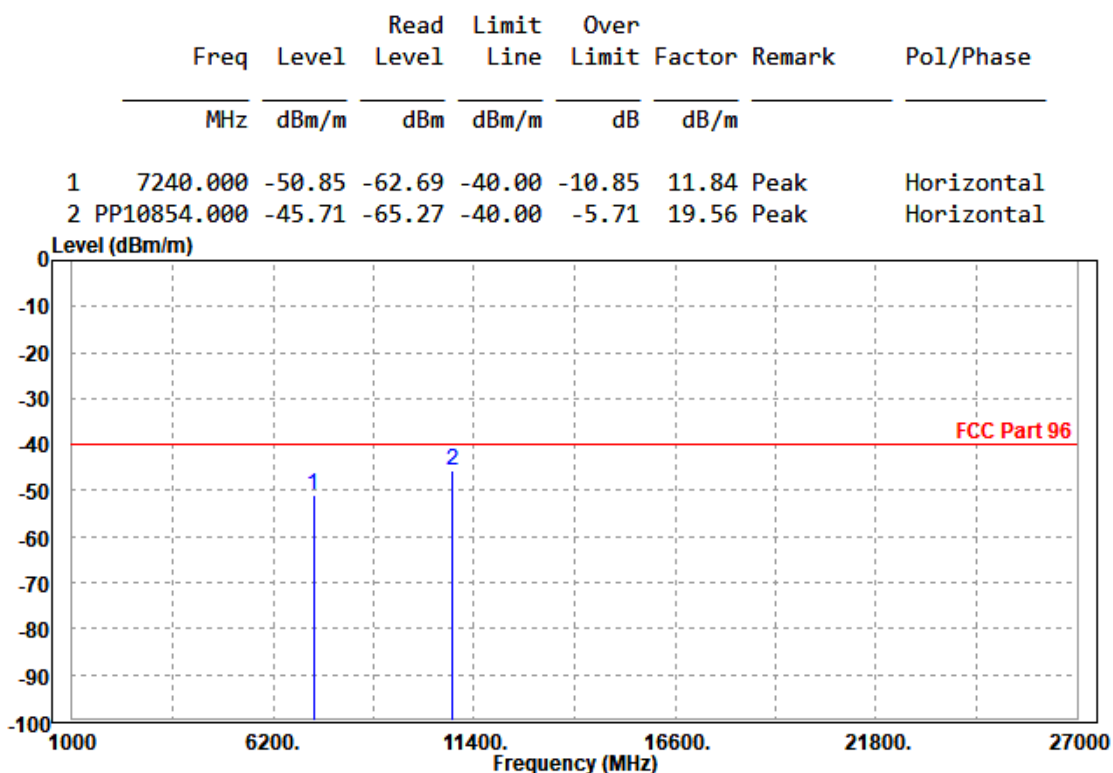
MODE	55340 /55538	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	7120.000	-49.95	-63.15	-40.00	-9.95	13.20	Peak	Vertical
2	PP10672.000	-46.43	-65.15	-40.00	-6.43	18.72	Peak	Vertical



CH 55891/56089

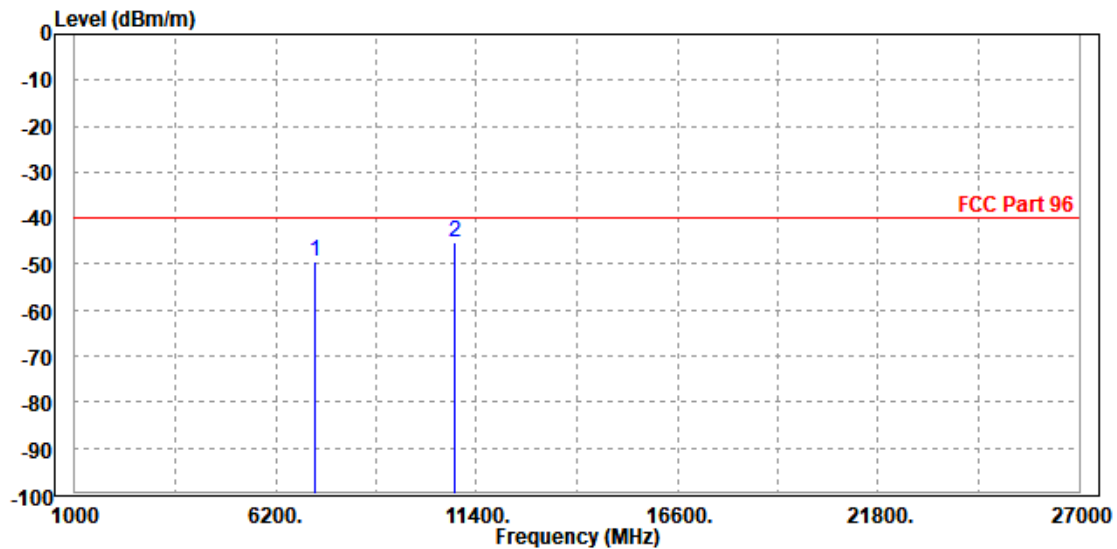
MODE	55891/56089	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			





MODE	55891/56089	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			

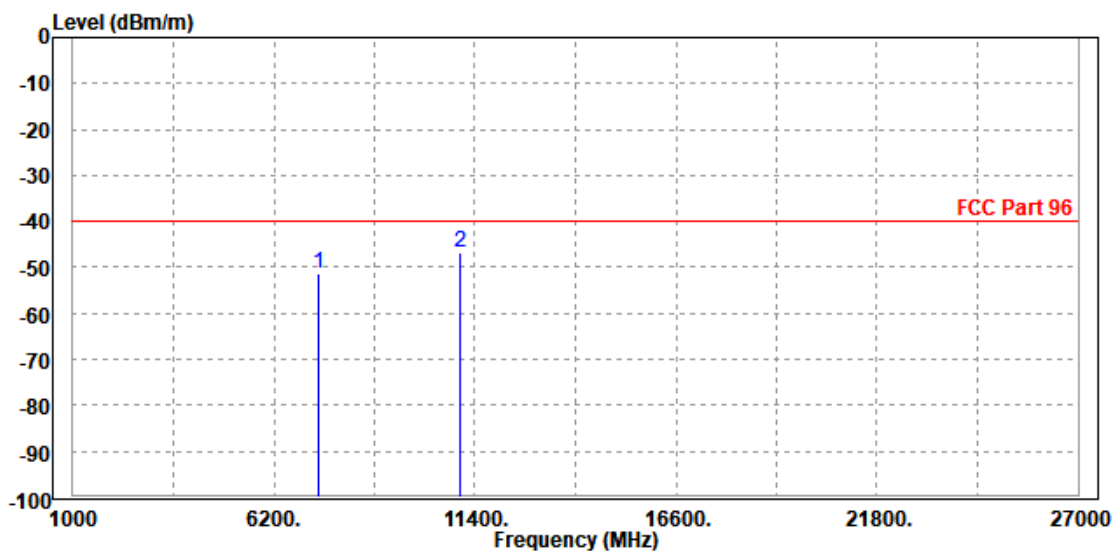
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	7230.200	-49.60	-63.24	-40.00	-9.60	13.64	Peak	Vertical
2	PP10854.000	-45.39	-64.96	-40.00	-5.39	19.57	Peak	Vertical



CH 56442 /56640

MODE	56442 /56640	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			

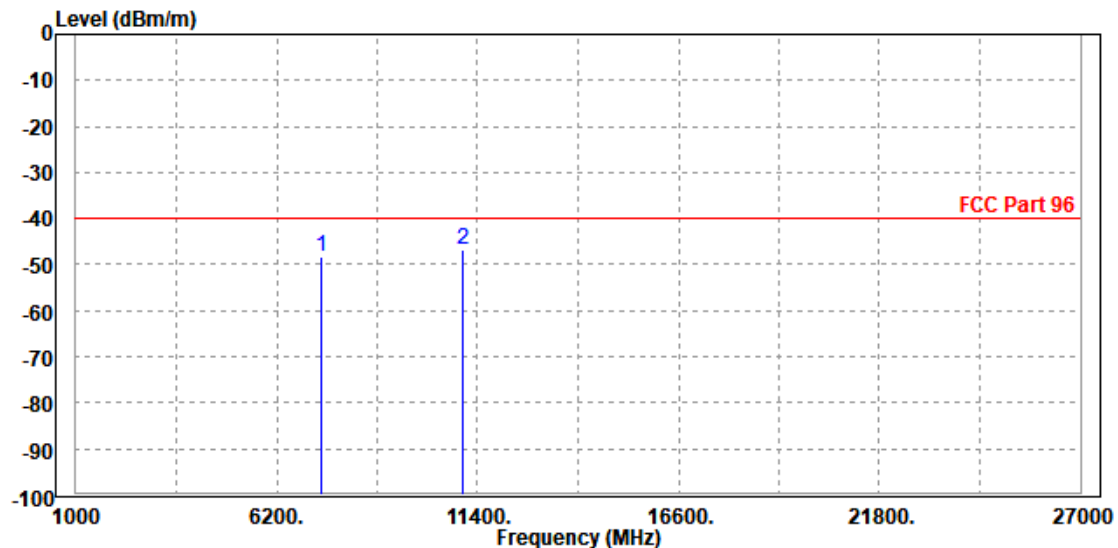
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	7340.400	-51.28	-62.96	-40.00	-11.28	11.68	Peak	Horizontal
2	PP11010.000	-46.92	-66.89	-40.00	-6.92	19.97	Peak	Horizontal





MODE	56442 /56640	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	7344.000	-48.39	-62.47	-40.00	-8.39	14.08	Peak	Vertical
2	PP11010.000	-46.91	-67.11	-40.00	-6.91	20.20	Peak	Vertical



4 INFORMATION ON THE TESTING LABORATORIES

We, BV 7LAYERS COMMUNICATIONS TECHNOLOGY (SHENZHEN) CO. LTD., were founded in 2015 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

Shenzhen EMC/RF Lab:

Tel: +86-755-88696566

Fax: +86-755-88696577

Email: customerservice.sw@cn.bureauveritas.com

Web Site: www.adt.com.tw

The address and road map of all our labs can be found in our web site also.

5 MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No any modifications are made to the EUT by the lab during the test.

--END--