



Test Report No.: W7L-240510W001RF03



FCC TEST REPORT

(PART 27)

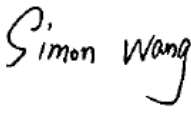
Applicant:	Quest Cameras, LLC
Address:	110 Iroquois Circle Russellville, KY 42276

Manufacturer or Supplier:	SHENZHEN TOVISION TECHNOLOGY CO.,LTD
Address:	136A,Yangguang zhonglv Garden, 2057# Qianhai Road.Nanshan District .SHENZHEN City. CHINA
Product:	Wireless trail camera
Brand Name:	QUEST
Model Name:	Command-X
FCC ID:	2BGCQCOMMANDX
Date of tests:	May. 12, 2024 ~ May. 23, 2024

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

☒ FCC Part 27 ☒ 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
 Date: May. 23, 2024	 Date: May. 23, 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-240510W001RF03	Original release	May. 23, 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
§2.1046	Conducted Output Power	Compliance
§27.50(b)(10) §27.50(c)(10)	Effective Radiated Power (Band 12) (Band 13)	Compliance
§27.50(d)(4)	Equivalent Isotropically Radiated Power (Band 66)	Compliance
§2.1055 §27.54	Frequency Stability	See Note
§2.1049	Occupied Bandwidth	See Note
§2.1051 §27.53(c)(2)(4) §27.53(g) §27.53(h)	Conducted Band Edge Measurements (Band 12) (Band 13) (Band 66)	See Note
§2.1051 §27.53(c)(2)(4) §27.53(g) §27.53(h)	Conducted Spurious Emissions (Band 12) (Band 13) (Band 66)	See Note
§2.1053 §27.53(c)(2)(4) §27.53(f) §27.53(g) §27.53(h)	Radiated Spurious Emissions (Band 12) (Band 13) (Band 66)	Compliance
NA	Peak to average ratio	See Note

Note: Please refer to the module report SEWA2212000096RG01(FCC ID: XMR2023EG915QNA)

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)	$\pm 2.68\text{dB}$
Radiated emissions & Radiated Power (30MHz~1GHz)	$\pm 4.98\text{dB}$
Radiated emissions & Radiated Power (1GHz ~6GHz)	$\pm 4.70\text{dB}$
Radiated emissions (6GHz ~18GHz)	$\pm 4.60\text{dB}$
Radiated emissions (18GHz ~40GHz)	$\pm 4.12\text{dB}$
Conducted Output power	$\pm 2.06\text{dB}$

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	Feb. 21,23	Feb. 20,24
EXA Signal Analyzer	KEYSIGHT	N9010A-544	MY54510355	May.15,23	May.14,24
EXA Signal Analyzer	KEYSIGHT	N9010A-544	MY54510355	May.14,24	May.13,25
Loop Antenna	Schwarzbeck	FMZB 1519B	00173	Sep.04,23	Sep.03,24
Bilog Antenna	ETS-LINDGRE N	3143B	00161965	Mar. 06,24	Mar. 05,25
Horn Antenna	ETS-LINDGRE N	3117	00168692	Mar. 06,24	Mar. 05,25
Horn Antenna (18GHz-40GHz)	N/A	QWH-SL-18-40-K- SG/QMS-00361	15433	Aug. 24, 23	Aug. 23, 24
Radio Communication Analyzer	ANRITSU	MT8820C	6201465426	Feb. 15,24	Feb. 14,25
Signal Pre-Amplifier	EMSI	EMC 9135	980249	May.12,24	May.11,25
Signal Pre-Amplifier	EMSI	EMC 012645B	980257	May.12,24	May.11,25
Signal Pre-Amplifier	EMSI	EMC 184045B	980259	Feb. 21,24	Feb.20,25
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	1505	May. 07,24	May. 06,25
Power Meter	Anritsu	ML2495A	1506002	Feb. 22,24	Feb. 21,25
Power Sensor	Anritsu	MA2411B	1339352	May. 07,24	May. 06,25
Temperature Chamber	ESPEC	SH-242	93000855	May. 12,24	May. 11,25
MXG Analog Microvave Signal Generator	KEYSIGHT	N5183A	MY50143024	Feb. 18,24	Feb. 17,25
Base station R&S CMW500	Rohde&Schwa rz	CMW500	153085	May.12,24	May.11,25
DC Source	Kikusui/JP	PMX18-5A	0000001	Aug. 24,23	Aug. 23,24

- 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	Wireless trail camera	
BRAND NAME	QUEST	
MODEL NAME	Command-X	
NOMINAL VOLTAGE	Battery(x12AA) 6V DC In 6V tpye C 5V	
MODULATION TECHNOLOGY	LTE	QPSK, 16QAM
FREQUENCY RANGE	LTE Band 4 Channel Bandwidth: 1.4MHz	1710.7MHz ~ 1754.3MHz
	LTE Band 4 Channel Bandwidth: 3MHz	1711.5MHz ~ 1753.5MHz
	LTE Band 4 Channel Bandwidth: 5MHz	1712.5MHz ~ 1752.5MHz
	LTE Band 4 Channel Bandwidth: 10MHz	1715MHz ~ 1750MHz
	LTE Band 4 Channel Bandwidth: 15MHz	1717.5MHz ~ 1747.5 MHz
	LTE Band 4 Channel Bandwidth: 20MHz	1720MHz ~ 1745MHz
	LTE Band 12 Channel Bandwidth: 1.4MHz	699.7MHz ~ 715.3MHz
	LTE Band 12 Channel Bandwidth: 3MHz	700.5MHz ~ 714.5MHz
	LTE Band 12 Channel Bandwidth: 5MHz	701.5MHz ~ 713.5MHz
	LTE Band 12 Channel Bandwidth: 10MHz	704MHz ~ 711MHz
	LTE Band 13 Channel Bandwidth: 5MHz	779.5MHz ~ 784.5MHz
	LTE Band 13 Channel Bandwidth: 10MHz	782MHz
	LTE Band 66 Channel Bandwidth: 1.4MHz	1710.7MHz ~ 1779.3MHz
	LTE Band 66 Channel Bandwidth: 3MHz	1711.5MHz ~ 1778.5MHz
	LTE Band 66 Channel Bandwidth: 5MHz	1712.5MHz ~ 1777.5MHz
	LTE Band 66 Channel Bandwidth: 10MHz	1715MHz ~ 1775MHz
	LTE Band 66 Channel Bandwidth: 15MHz	1717.5MHz ~ 1772.5MHz



**BUREAU
VERITAS**

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MAX. EIRP POWER	LTE Band 66 Channel Bandwidth: 20MHz	1720MHz ~ 1770MHz
	LTE Band 4 Channel Bandwidth: 1.4MHz	291.07mW
	LTE Band 4 Channel Bandwidth: 3MHz	290.4mW
	LTE Band 4 Channel Bandwidth: 5MHz	287.74mW
	LTE Band 4 Channel Bandwidth: 10MHz	285.1mW
	LTE Band 4 Channel Bandwidth: 15MHz	284.45mW
	LTE Band 4 Channel Bandwidth: 20MHz	291.74mW
	LTE Band 12 Channel Bandwidth: 1.4MHz	127.64mW
	LTE Band 12 Channel Bandwidth: 3MHz	123.03mW
	LTE Band 12 Channel Bandwidth: 5MHz	122.18mW
	LTE Band 12 Channel Bandwidth: 10MHz	126.47mW
	LTE Band 13 Channel Bandwidth: 5MHz	149.28mW
	LTE Band 13 Channel Bandwidth: 10MHz	150.31mW
	LTE Band 66 Channel Bandwidth: 1.4MHz	310.46mW
	LTE Band 66 Channel Bandwidth: 3MHz	304.79mW
	LTE Band 66 Channel Bandwidth: 5MHz	313.33mW
	LTE Band 66 Channel Bandwidth: 10MHz	309.03mW
	LTE Band 66 Channel Bandwidth: 15MHz	311.89mW
	LTE Band 66 Channel Bandwidth: 20MHz	314.77mW
EMISSION DESIGNATOR	LTE Band 12 Channel Bandwidth: 1.4MHz	QPSK: 1M09G7D 16QAM: 1M10W7D
	LTE Band 12 Channel Bandwidth: 3MHz	QPSK: 2M70G7D 16QAM: 2M69W7D
	LTE Band 12	QPSK: 4M47G7D



**BUREAU
VERITAS**

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	Channel Bandwidth: 5MHz	16QAM: 4M47W7D
	LTE Band 12	QPSK: 8M95G7D
	Channel Bandwidth: 10MHz	16QAM: 4M89W7D
	LTE Band 13	QPSK: 4M47G7D
	Channel Bandwidth: 5MHz	16QAM: 4M47W7D
	LTE Band 13	QPSK: 8M92G7D
	Channel Bandwidth: 10MHz	16QAM: 4M89W7D
	LTE Band 66	QPSK: 1M09G7D
	Channel Bandwidth: 1.4MHz	16QAM: 1M10W7D
	LTE Band 66	QPSK: 2M70G7D
	Channel Bandwidth: 3MHz	16QAM: 2M69W7D
	LTE Band 66	QPSK: 4M47G7D
	Channel Bandwidth: 5MHz	16QAM: 4M47W7D
	LTE Band 66	QPSK: 8M95G7D
	Channel Bandwidth: 10MHz	16QAM: 4M89W7D
	LTE Band 66	QPSK: 13M5G7D
	Channel Bandwidth: 15MHz	16QAM: 5M22W7D
	LTE Band 66	QPSK: 18M0G7D
	Channel Bandwidth: 20MHz	16QAM: 5M26W7D
ANTENNA TYPE	Fixed External Antenna with 0.88dBi gain for LTE B4 Fixed External Antenna with -0.48dBi gain for LTE B12 Fixed External Antenna with 0.59dBi gain for LTE B13 Fixed External Antenna with 1.09dBi gain for LTE B66	
HW VERSION	Quest 560 V01	
SW VERSION	Quest_20240413.01	
I/O PORTS	Refer to user's manual	
CABLE SUPPLIED	N/A	
EXTREME TEMPERATURE	-20-70 °C	
EXTREME VOLTAGE	4.1V - 6.8V	

NOTE:

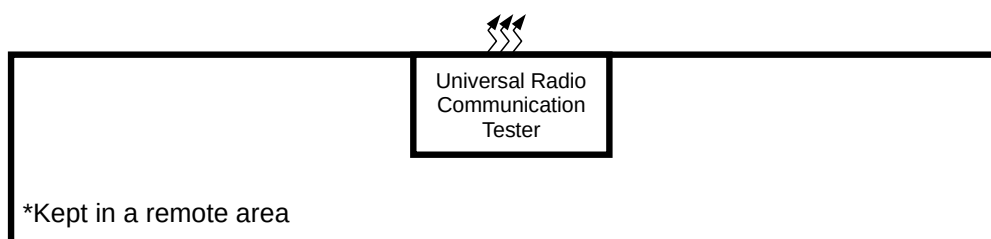
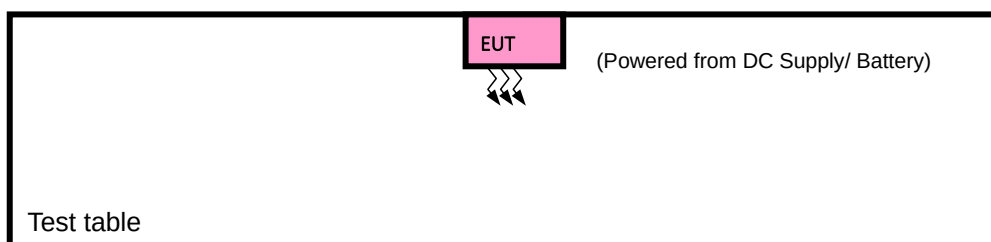
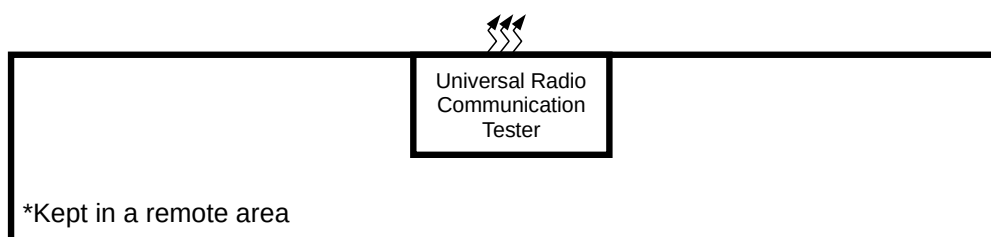
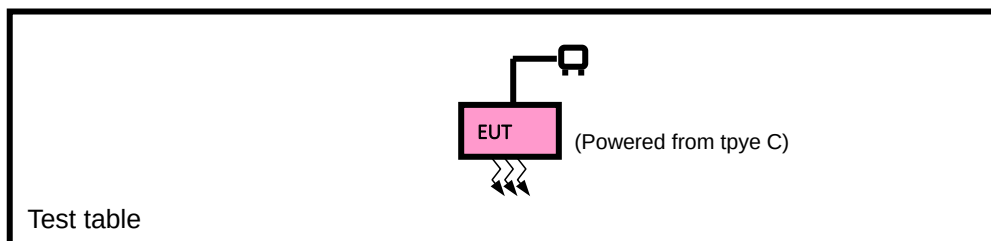
- For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
- The EUT incorporates a SISO function. Physically, the EUT provides one completed transmitter and one receiver.

MODULATION MODE	TX FUNCTION
LTE	1TX/1RX

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

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 + type C with LTE link
B	EUT + DC Supply with LTE link

LTE BAND 4 MODE

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
A	EIRP	19957 to 20393	19957, 20175, 20393	1.4MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		19965 to 20385	19965, 20175, 20385	3MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		19975 to 20375	19975, 20175, 20375	5MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		20000 to 20350	20000, 20175, 20350	10MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		20025 to 20325	20025, 20175, 20325	15MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		20050 to 20300	20050, 20175, 20300	20MHz	QPSK, 16QAM	1 RB / 0 RB Offset

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

2. LTE Band 4 are covered by LTE Band 66, Because it is a subset of LTE Band 66 with the same output power and supported bandwidths, So the conducted test data and RSE test data please refer to LTE Band 66

LTE BAND 12 MODE

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
A	ERP	23017 to 23173	23017, 23095, 23173	1.4MHz	QPSK,16QAM	1 RB / 0 RB Offset
		23025 to 23165	23025, 23095 ,23165	3MHz	QPSK,16QAM	1 RB / 0 RB Offset
		23035 to 23155	23035, 23095 ,23155	5MHz	QPSK,16QAM	1 RB / 0 RB Offset
		23060 to 23130	23060, 23095 ,23130	10MHz	QPSK,16QAM	1 RB / 0 RB Offset
A	RADIATED EMISSION	23017 to 23173	23095	1.4MHz	QPSK	1 RB / 0 RB Offset
		23025 to 23165	23025, 23095 ,23165	3MHz	QPSK	1 RB / 0 RB Offset
		23035 to 23155	23095	5MHz	QPSK	1 RB / 0 RB Offset
		23060 to 23130	23095	10MHz	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 13 MODE

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
A	ERP	23205 to 23255	23205, 23230, 23255	5MHz	QPSK,16QAM	1 RB / 0 RB Offset
		23230	23230	10MHz	QPSK,16QAM	1 RB / 0 RB Offset
A	RADIATED EMISSION	23205 to 23255	23205, 23230, 23255	5MHz	QPSK	1 RB / 0 RB Offset
		23230	23230	10MHz	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 66 MODE

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
A	EIRP	131979 to 132665	131979,132322,132665	1.4MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		131987 to 132657	131987,132322,132657	3MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		131997 to 132647	131997,132322,132647	5MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		132022 to 132622	132022,132322,132622	10MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		132047 to 132597	132047,132322,132597	15MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		132072 to 132572	132072,132322,132572	20MHz	QPSK, 16QAM	1 RB / 0 RB Offset
A	RADIATED EMISSION	131979 to 132665	132322	1.4MHz	QPSK	1 RB / 0 RB Offset
		131987 to 132657	132322	3MHz	QPSK	1 RB / 0 RB Offset
		131997 to 132647	132322	5MHz	QPSK	1 RB / 0 RB Offset
		132022 to 132622	132022,132322,132622	10MHz	QPSK	1 RB / 0 RB Offset
		132047 to 132597	132322	15MHz	QPSK	1 RB / 0 RB Offset
		132072 to 132572	132322	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.



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TEST CONDITION:

TEST ITEM	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
ERP&EIRP	23deg. C, 70%RH	Battery(x12AA) 6V	Jace Hu
RADIATED EMISSION	23deg. C, 70%RH	Battery(x12AA) 6V	Jace Hu



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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 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

Fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band and mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1-watt EIRP

According to the specific rule Part 27.50(b)(10) and 27.50(c)(10) Fixed, mobile, and Portable stations (hand-held devices) transmitting in the 698-746 MHz, 746-757 MHz, 776-788 MHz, and 805-806 MHz bands are limited to 3 watts ERP.

3.1.2 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);

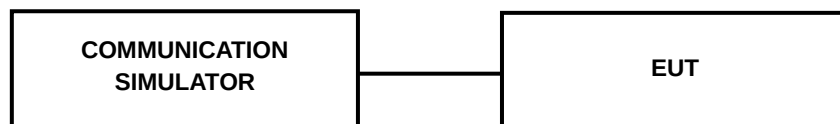
L_{C} = signal attenuation in the connecting cable between the transmitter and antenna, in dB.

CONDUCTED POWER MEASUREMENT:

- The EUT was set up for the maximum power with LTE link data modulation and link up with simulator.
- 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:



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

CONDUCTED OUTPUT POWER (dBm)

LTE Band 4						
BW	Modulation	RB Size	RB Offset	Low	Mid	High
		Channel		20050	20175	20300
		Frequency (MHz)		1720	1732.5	1745
20M	QPSK	1	0	23.77	23.63	23.76
		1	50	23.45	23.29	23.21
		1	99	23.32	23.25	23.23
		50	0	22.37	22.23	22.24
		50	25	22.38	22.26	22.22
		50	50	22.48	22.21	22.26
		100	0	22.39	22.21	22.28
	16QAM	1	0	23.11	22.71	22.81
		1	50	22.64	22.41	22.48
		1	99	22.78	22.41	22.68
		12	0	22.54	22.37	22.37
		12	42	22.36	22.28	22.18
		12	86	22.21	22.17	22.22
		27	0	21.62	21.35	21.52

BW	Modulation	Channel		20025	20175	20325
		Frequency (MHz)		1717.5	1732.5	1747.5
15M	QPSK	1	0	23.66	23.61	23.63
		1	37	23.34	23.23	23.12
		1	74	23.18	23.21	23.18
		36	0	22.22	22.10	22.12
		36	19	22.32	22.22	22.15
		36	39	22.38	22.20	22.19
		75	0	22.24	22.17	22.13
	16QAM	1	0	23.08	22.69	22.76
		1	37	22.50	22.39	22.37
		1	74	22.64	22.40	22.56
		12	0	22.45	22.27	22.31
		12	30	22.25	22.20	22.04
		12	61	22.18	22.07	22.07
		27	0	21.61	21.29	21.40

BW	Modulation	Channel		20000	20175	20350
		Frequency (MHz)		1715	1732.5	1750
10M	QPSK	1	0	23.67	23.48	23.62
		1	24	23.36	23.16	23.09
		1	49	23.25	23.16	23.11
		25	0	22.27	22.12	22.11
		25	12	22.28	22.17	22.10
		25	25	22.43	22.12	22.22
		50	0	22.25	22.08	22.17
	16QAM	1	0	22.97	22.57	22.72
		1	24	22.52	22.39	22.35
		1	49	22.67	22.39	22.55
		12	0	22.52	22.25	22.36
		12	17	22.22	22.15	22.04
		12	36	22.18	22.09	22.11
		27	0	21.60	21.25	21.46

BW	Modulation	Channel		19975	20175	20375
		Frequency (MHz)		1712.5	1732.5	1752.5
5M	QPSK	1	0	23.71	23.59	23.71
		1	12	23.34	23.27	23.16
		1	24	23.22	23.15	23.12
		12	0	22.36	22.20	22.14
		12	6	22.34	22.20	22.18
		12	13	22.44	22.16	22.13
		25	0	22.30	22.08	22.26
	16QAM	1	0	23.08	22.57	22.79
		1	12	22.51	22.40	22.41
		1	24	22.64	22.31	22.63
		12	0	21.51	21.32	21.22
		12	6	21.29	21.22	21.04
		12	13	21.19	21.12	21.12
		25	0	21.47	21.22	21.43

BW	Modulation	Channel		19965	20175	20385
		Frequency (MHz)		1711.5	1732.5	1753.5
3M	QPSK	1	0	23.71	23.59	23.75
		1	7	23.44	23.28	23.10
		1	14	23.18	23.14	23.18
		8	0	22.22	22.14	22.17
		8	3	22.26	22.15	22.07
		8	7	22.34	22.08	22.22
		15	0	22.37	22.19	22.17
	16QAM	1	0	23.06	22.58	22.80
		1	7	22.62	22.38	22.45
		1	14	22.69	22.35	22.67
		8	0	21.53	21.36	21.25
		8	3	21.27	21.14	21.10
		8	7	21.09	21.06	21.11
		15	0	21.47	21.24	21.40

BW	Modulation	Channel		19957	20175	20393
		Frequency (MHz)		1710.7	1732.5	1754.3
1.4M	QPSK	1	0	23.76	23.49	23.67
		1	2	23.44	23.28	23.16
		1	5	23.20	23.23	23.15
		3	0	23.28	23.21	23.18
		3	1	23.35	23.11	23.16
		3	3	23.33	23.12	23.15
		6	0	22.38	22.19	22.16
	16QAM	1	0	22.99	22.64	22.70
		1	2	22.57	22.30	22.33
		1	5	22.74	22.28	22.61
		3	0	22.50	22.30	22.34
		3	1	22.24	22.21	22.04
		3	3	22.15	22.09	22.09
		6	0	21.60	21.24	21.41

LTE Band 12						
BW	Modulation	RB Size	RB Offset	Low	Mid	High
		Channel		23060	23095	23130
		Frequency (MHz)		704	707.5	711
10M	QPSK	1	0	23.65	23.56	23.56
		1	24	23.45	23.35	23.25
		1	49	23.28	23.34	23.34
		25	0	22.70	22.72	22.60
		25	12	22.45	22.43	22.47
		25	25	22.39	22.18	22.22
		50	0	22.50	22.56	22.49
	16QAM	1	0	22.54	22.65	22.52
		1	24	22.53	22.46	22.33
		1	49	22.44	22.51	22.44
		12	0	22.47	22.36	22.58
		12	17	22.30	22.30	22.21
		12	36	22.17	22.25	22.20
		27	0	21.53	21.50	21.51

BW	Modulation	Channel		23035	23095	23155
		Frequency (MHz)		701.5	707.5	713.5
5M	QPSK	1	0	23.50	23.48	23.41
		1	12	23.39	23.21	23.20
		1	24	23.24	23.29	23.23
		12	0	22.57	22.63	22.46
		12	6	22.39	22.39	22.34
		12	13	22.31	22.09	22.07
		25	0	22.48	22.51	22.39
	16QAM	1	0	22.43	22.53	22.48
		1	12	22.49	22.32	22.28
		1	24	22.37	22.49	22.31
		12	0	21.46	21.28	21.53
		12	6	21.17	21.20	21.13
		12	13	21.10	21.20	21.05
		25	0	21.47	21.45	21.45

BW	Modulation	Channel		23025	23095	23165
		Frequency (MHz)		700.5	707.5	714.5
3M	QPSK	1	0	23.50	23.43	23.53
		1	7	23.37	23.32	23.20
		1	14	23.27	23.20	23.19
		8	0	22.55	22.64	22.54
		8	3	22.38	22.37	22.34
		8	7	22.33	22.10	22.07
		15	0	22.44	22.54	22.48
	16QAM	1	0	22.43	22.55	22.44
		1	7	22.47	22.41	22.22
		1	14	22.41	22.47	22.35
		8	0	21.32	21.31	21.51
		8	3	21.18	21.16	21.09
		8	7	21.12	21.15	21.09
		15	0	21.52	21.47	21.50

BW	Modulation	Channel		23017	23095	23173
		Frequency (MHz)		699.7	707.5	715.3
1.4M	QPSK	1	0	23.52	23.44	23.53
		1	2	23.31	23.21	23.13
		1	5	23.19	23.33	23.27
		3	0	23.69	23.69	23.55
		3	1	23.34	23.42	23.43
		3	3	23.35	23.06	23.14
		6	0	22.47	22.46	22.39
	16QAM	1	0	22.53	22.63	22.48
		1	2	22.52	22.35	22.31
		1	5	22.33	22.49	22.43
		3	0	22.44	22.23	22.50
		3	1	22.25	22.25	22.12
		3	3	22.14	22.20	22.10
		6	0	21.42	21.37	21.43

LTE Band 13						
BW	Modulation	RB Size	RB Offset	Mid		
		Channel		23230		
		Frequency (MHz)		782		
10M	QPSK	1	0		23.33	
		1	24		23.24	
		1	49		23.20	
		25	0		22.21	
		25	12		22.59	
		25	25		22.55	
		50	0		22.62	
	16QAM	1	0		23.12	
		1	24		22.76	
		1	49		23.07	
		12	0		22.82	
		12	17		22.55	
		12	36		22.53	
		27	0		21.85	

BW	Modulation	Channel		23205	23230	23255
		Frequency (MHz)		779.5	782	784.5
5M	QPSK	1	0	23.30	23.28	23.20
		1	12	23.10	23.12	23.23
		1	24	23.05	23.09	23.06
		12	0	22.15	22.19	22.16
		12	6	22.56	22.58	22.51
		12	13	22.46	22.44	22.42
		25	0	22.60	22.59	22.54
	16QAM	1	0	23.02	23.00	23.02
		1	12	22.63	22.71	22.68
		1	24	23.02	22.99	22.97
		12	0	21.72	21.72	21.72
		12	6	21.50	21.47	21.42
		12	13	21.41	21.49	21.44
		25	0	21.78	21.81	21.82

LTE Band 66						
BW	Modulation	RB Size	RB Offset	Low	Mid	High
		Channel		132072	132322	132572
		Frequency (MHz)		1720	1745	1770
20M	QPSK	1	0	23.83	23.82	23.89
		1	50	23.39	23.44	23.54
		1	99	23.38	23.29	23.50
		50	0	22.66	22.59	22.65
		50	25	22.50	22.48	22.61
		50	50	22.47	22.43	22.59
		100	0	22.45	22.43	22.64
	16QAM	1	0	23.01	22.98	23.09
		1	50	22.71	22.70	22.79
		1	99	22.58	22.66	22.77
		12	0	22.77	22.76	22.74
		12	42	22.39	22.41	22.46
		12	86	22.31	22.32	22.40
		27	0	21.81	21.81	21.95

BW	Modulation	Channel		132047	132322	132597
		Frequency (MHz)		1717.5	1745	1772.5
15M	QPSK	1	0	23.75	23.76	23.85
		1	37	23.30	23.41	23.46
		1	74	23.35	23.17	23.44
		36	0	22.52	22.44	22.62
		36	19	22.37	22.45	22.58
		36	39	22.45	22.40	22.53
		75	0	22.39	22.41	22.54
	16QAM	1	0	22.90	22.89	22.94
		1	37	22.61	22.69	22.64
		1	74	22.52	22.63	22.71
		12	0	22.67	22.74	22.71
		12	30	22.25	22.26	22.45
		12	61	22.28	22.20	22.36
		27	0	21.71	21.71	21.83

BW	Modulation	Channel		132022	132322	132622
		Frequency (MHz)		1715	1745	1775
10M	QPSK	1	0	23.80	23.68	23.81
		1	24	23.27	23.34	23.43
		1	49	23.30	23.19	23.41
		25	0	22.65	22.49	22.51
		25	12	22.49	22.37	22.58
		25	25	22.39	22.31	22.54
		50	0	22.34	22.31	22.51
	16QAM	1	0	22.88	22.95	23.05
		1	24	22.69	22.61	22.73
		1	49	22.50	22.63	22.62
		12	0	22.67	22.71	22.66
		12	17	22.34	22.38	22.39
		12	36	22.28	22.24	22.30
		27	0	21.75	21.73	21.81

BW	Modulation	Channel		131997	132322	132647
		Frequency (MHz)		1712.5	1745	1777.5
5M	QPSK	1	0	23.74	23.75	23.87
		1	12	23.27	23.38	23.51
		1	24	23.34	23.24	23.49
		12	0	22.61	22.50	22.55
		12	6	22.36	22.38	22.46
		12	13	22.37	22.36	22.55
		25	0	22.43	22.33	22.54
	16QAM	1	0	22.86	22.85	23.08
		1	12	22.68	22.66	22.66
		1	24	22.43	22.53	22.75
		12	0	21.65	21.65	21.71
		12	6	21.34	21.29	21.31
		12	13	21.25	21.22	21.37
		27	0	21.75	21.69	21.82

BW	Modulation	Channel		131987	132322	132657
		Frequency (MHz)		1711.5	1745	1778.5
3M	QPSK	1	0	23.75	23.68	23.74
		1	7	23.31	23.39	23.40
		1	14	23.28	23.17	23.47
		8	0	22.52	22.53	22.55
		8	3	22.44	22.42	22.48
		8	7	22.41	22.29	22.55
		15	0	22.31	22.41	22.50
	16QAM	1	0	22.89	22.83	23.06
		1	7	22.64	22.61	22.75
		1	14	22.54	22.59	22.62
		8	0	21.64	21.72	21.66
		8	3	21.33	21.35	21.37
		8	7	21.30	21.17	21.38
		15	0	21.71	21.70	21.82

BW	Modulation	Channel		131979	132322	132665
		Frequency (MHz)		1710.7	1745	1779.3
1.4M	QPSK	1	0	23.77	23.77	23.83
		1	2	23.29	23.38	23.39
		1	5	23.32	23.22	23.38
		3	0	23.53	23.45	23.55
		3	1	23.36	23.45	23.52
		3	3	23.37	23.30	23.44
		6	0	22.32	22.37	22.55
	16QAM	1	0	23.00	22.87	23.03
		1	2	22.57	22.57	22.66
		1	5	22.54	22.58	22.63
		3	0	22.69	22.67	22.72
		3	1	22.27	22.29	22.35
		3	3	22.28	22.20	22.29
		6	0	21.73	21.79	21.86

3.1.4 TEST RESULTS

EIRP

LTE BAND 4

LTE B4 1.4M QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)	EIRP (mW)	Lmit (W)
19957	1710.7	23.76	0.88	24.64	291.07	1
20175	1732.5	23.49	0.88	24.37	273.53	1
20393	1754.3	23.67	0.88	24.55	285.1	1

LTE B4 1.4M 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)	EIRP (mW)	Lmit (W)
19957	1710.7	22.99	0.88	23.87	243.78	1
20175	1732.5	22.64	0.88	23.52	224.91	1
20393	1754.3	22.7	0.88	23.58	228.03	1

LTE B4 3M QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)	EIRP (mW)	Lmit (W)
19965	1711.5	23.71	0.88	24.59	287.74	1
20175	1732.5	23.59	0.88	24.47	279.9	1
20385	1753.5	23.75	0.88	24.63	290.4	1

LTE B4 3M 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)	EIRP (mW)	Lmit (W)
19965	1711.5	23.06	0.88	23.94	247.74	1
20175	1732.5	22.69	0.88	23.57	227.51	1
20385	1753.5	22.69	0.88	23.57	227.51	1

LTE B4 5M QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)	EIRP (mW)	Lmit (W)
19975	1712.5	23.71	0.88	24.59	287.74	1
20175	1732.5	23.59	0.88	24.47	279.9	1
20375	1752.5	23.71	0.88	24.59	287.74	1

LTE B4 5M 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)	EIRP (mW)	Lmit (W)
19975	1712.5	23.08	0.88	23.96	248.89	1
20175	1732.5	22.57	0.88	23.45	221.31	1
20375	1752.5	22.79	0.88	23.67	232.81	1

LTE B4 10M QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)	EIRP (mW)	Lmit (W)
20000	1715	23.67	0.88	24.55	285.1	1
20175	1732.5	23.48	0.88	24.36	272.9	1
20350	1750	23.62	0.88	24.5	281.84	1

LTE B4 10M 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)	EIRP (mW)	Lmit (W)
20000	1715	22.97	0.88	23.85	242.66	1
20175	1732.5	22.57	0.88	23.45	221.31	1
20350	1750	22.72	0.88	23.6	229.09	1

LTE B4 15M QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)	EIRP (mW)	Lmit (W)
20025	1717.5	23.66	0.88	24.54	284.45	1
20175	1732.5	23.61	0.88	24.49	281.19	1
20325	1747.5	23.63	0.88	24.51	282.49	1

LTE B4 15M 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)	EIRP (mW)	Lmit (W)
20025	1717.5	23.08	0.88	23.96	248.89	1
20175	1732.5	22.69	0.88	23.57	227.51	1
20325	1747.5	22.76	0.88	23.64	231.21	1

LTE B4 20M QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)	EIRP (mW)	Lmit (W)
20050	1720	23.77	0.88	24.65	291.74	1
20175	1732.5	23.63	0.88	24.51	282.49	1
20300	1745	23.76	0.88	24.64	291.07	1

LTE B4 20M 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)	EIRP (mW)	Lmit (W)
20050	1720	23.11	0.88	23.99	250.61	1
20175	1732.5	22.71	0.88	23.59	228.56	1
20300	1745	22.81	0.88	23.69	233.88	1



BUREAU
VERITAS

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LTE BAND 12

LTE B12 1.4M QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	ERP (dBm)	ERP (mW)	Lmit (W)
23017	699.7	23.69	-0.48	21.06	127.64	3
23095	707.5	23.69	-0.48	21.06	127.64	3
23173	715.3	23.55	-0.48	20.92	123.59	3

LTE B12 1.4M 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	ERP (dBm)	ERP (mW)	Lmit (W)
23017	699.7	22.53	-0.48	19.9	97.72	3
23095	707.5	22.63	-0.48	20	100	3
23173	715.3	22.5	-0.48	19.87	97.05	3

LTE B12 3M QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	ERP (dBm)	ERP (mW)	Lmit (W)
23025	700.5	23.5	-0.48	20.87	122.18	3
23095	707.5	23.43	-0.48	20.8	120.23	3
23165	714.5	23.53	-0.48	20.9	123.03	3

LTE B12 3M 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	ERP (dBm)	ERP (mW)	Lmit (W)
23025	700.5	22.47	-0.48	19.84	96.38	3
23095	707.5	22.55	-0.48	19.92	98.17	3
23165	714.5	22.44	-0.48	19.81	95.72	3

LTE B12 5M QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	ERP (dBm)	ERP (mW)	Lmit (W)
23035	701.5	23.5	-0.48	20.87	122.18	3
23095	707.5	23.48	-0.48	20.85	121.62	3
23155	713.5	23.41	-0.48	20.78	119.67	3

LTE B12 5M 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	ERP (dBm)	ERP (mW)	Lmit (W)
23035	701.5	22.49	-0.48	19.86	96.83	3
23095	707.5	22.53	-0.48	19.9	97.72	3
23155	713.5	22.48	-0.48	19.85	96.61	3

LTE B12 10M QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	ERP (dBm)	ERP (mW)	Lmit (W)
23060	704	23.65	-0.48	21.02	126.47	3
23095	707.5	23.56	-0.48	20.93	123.88	3
23130	711	23.56	-0.48	20.93	123.88	3

LTE B12 10M 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	ERP (dBm)	ERP (mW)	Lmit (W)
23060	704	22.54	-0.48	19.91	97.95	3
23095	707.5	22.65	-0.48	20.02	100.46	3
23130	711	22.58	-0.48	19.95	98.86	3

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



**BUREAU
VERITAS**

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LTE BAND 13

LTE B13 5M QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	ERP (dBm)	ERP (mW)	Lmit (W)
23205	779.5	23.3	0.59	21.74	149.28	3
23230	782	23.28	0.59	21.72	148.59	3
23255	784.5	23.23	0.59	21.67	146.89	3

LTE B13 5M 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	ERP (dBm)	ERP (mW)	Lmit (W)
23205	779.5	23.02	0.59	21.46	139.96	3
23230	782	23	0.59	21.44	139.32	3
23255	784.5	23.02	0.59	21.46	139.96	3

LTE B13 10M QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	ERP (dBm)	ERP (mW)	Lmit (W)
23230	782	0	0.59	-1.56	0.7	3
23230	782	23.33	0.59	21.77	150.31	3
23230	782	0	0.59	-1.56	0.7	3

LTE B13 10M 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	ERP (dBm)	ERP (mW)	Lmit (W)
23230	782	0	0.59	-1.56	0.7	3
23230	782	23.12	0.59	21.56	143.22	3
23230	782	0	0.59	-1.56	0.7	3

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



**BUREAU
VERITAS**

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LTE BAND 66

LTE B66 1.4M QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)	EIRP (mW)	Lmit (W)
131979	1710.7	23.77	1.09	24.86	306.2	1
132322	1745	23.77	1.09	24.86	306.2	1
132665	1779.3	23.83	1.09	24.92	310.46	1

LTE B66 1.4M 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)	EIRP (mW)	Lmit (W)
131979	1710.7	23	1.09	24.09	256.45	1
132322	1745	22.87	1.09	23.96	248.89	1

LTE B66 3M QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)	EIRP (mW)	Lmit (W)
131987	1711.5	23.75	1.09	24.84	304.79	1
132322	1745	23.68	1.09	24.77	299.92	1
132657	1778.5	23.74	1.09	24.83	304.09	1

LTE B66 3M 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)	EIRP (mW)	Lmit (W)
131987	1711.5	22.89	1.09	23.98	250.03	1
132322	1745	22.83	1.09	23.92	246.6	1
132657	1778.5	23.06	1.09	24.15	260.02	1

LTE B66 5M QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)	EIRP (mW)	Lmit (W)
131997	1712.5	23.74	1.09	24.83	304.09	1
132322	1745	23.75	1.09	24.84	304.79	1
132647	1777.5	23.87	1.09	24.96	313.33	1

LTE B66 5M 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)	EIRP (mW)	Lmit (W)
131997	1712.5	22.86	1.09	23.95	248.31	1
132322	1745	22.85	1.09	23.94	247.74	1
132647	1777.5	23.08	1.09	24.17	261.22	1

LTE B66 10M QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)	EIRP (mW)	Lmit (W)
132022	1715	23.8	1.09	24.89	308.32	1
132322	1745	23.68	1.09	24.77	299.92	1
132622	1775	23.81	1.09	24.9	309.03	1

LTE B66 10M 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)	EIRP (mW)	Lmit (W)
132022	1715	22.88	1.09	23.97	249.46	1
132322	1745	22.95	1.09	24.04	253.51	1
132622	1775	23.05	1.09	24.14	259.42	1

LTE B66 15M QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)	EIRP (mW)	Lmit (W)
132047	1717.5	23.75	1.09	24.84	304.79	1
132322	1745	23.76	1.09	24.85	305.49	1
132597	1772.5	23.85	1.09	24.94	311.89	1

LTE B66 15M 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)	EIRP (mW)	Lmit (W)
132047	1717.5	22.9	1.09	23.99	250.61	1
132322	1745	22.89	1.09	23.98	250.03	1
132597	1772.5	22.94	1.09	24.03	252.93	1

LTE B66 20M QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)	EIRP (mW)	Lmit (W)
132072	1720	23.83	1.09	24.92	310.46	1
132322	1745	23.82	1.09	24.91	309.74	1
132572	1770	23.89	1.09	24.98	314.77	1

LTE B66 20M 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)	EIRP (mW)	Lmit (W)
132072	1720	23.01	1.09	24.1	257.04	1
132322	1745	22.98	1.09	24.07	255.27	1
132572	1770	23.09	1.09	24.18	261.82	1

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

3.2 RADIATED EMISSION MEASUREMENT

3.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB. The emission limit equal to -13dBm .

3.2.2 TEST PROCEDURES

- 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.
- 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.
- $\text{EIRP} = \text{Output power level of S.G} - \text{TX cable loss} + \text{Antenna gain of substitution horn.}$
- E.R.P power can be calculated form E.I.R.P power by subtracting the gain of dipole,
 $\text{E.R.P power} = \text{E.I.P.R power} - 2.15\text{dBi.}$

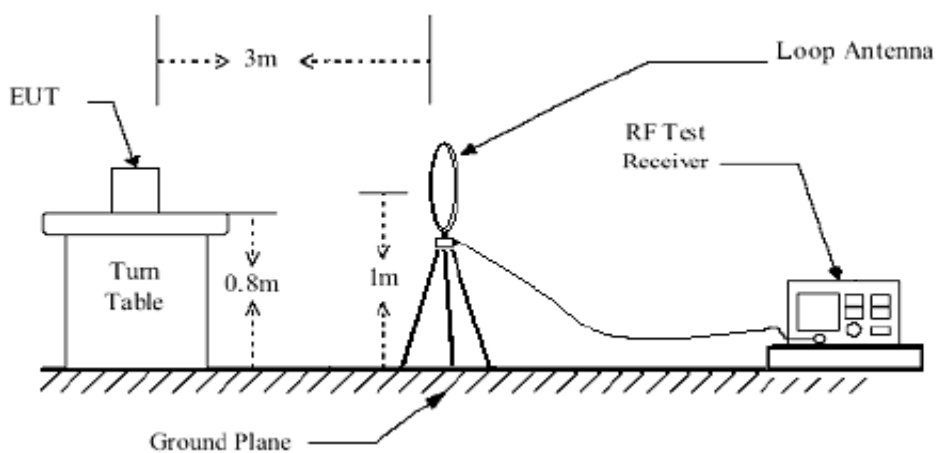
NOTE: The resolution bandwidth of spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz.

3.2.3 DEVIATION FROM TEST STANDARD

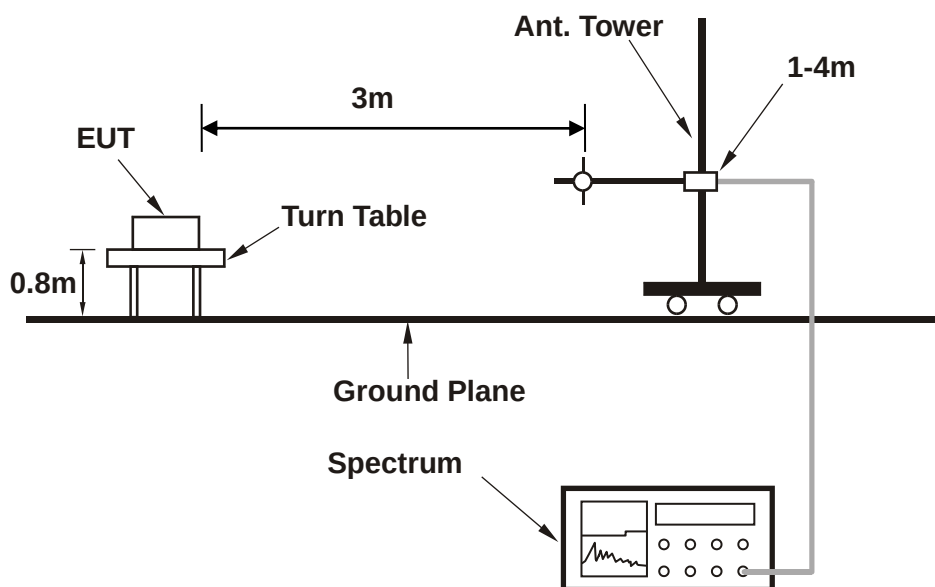
No deviation

3.2.4 TEST SETUP

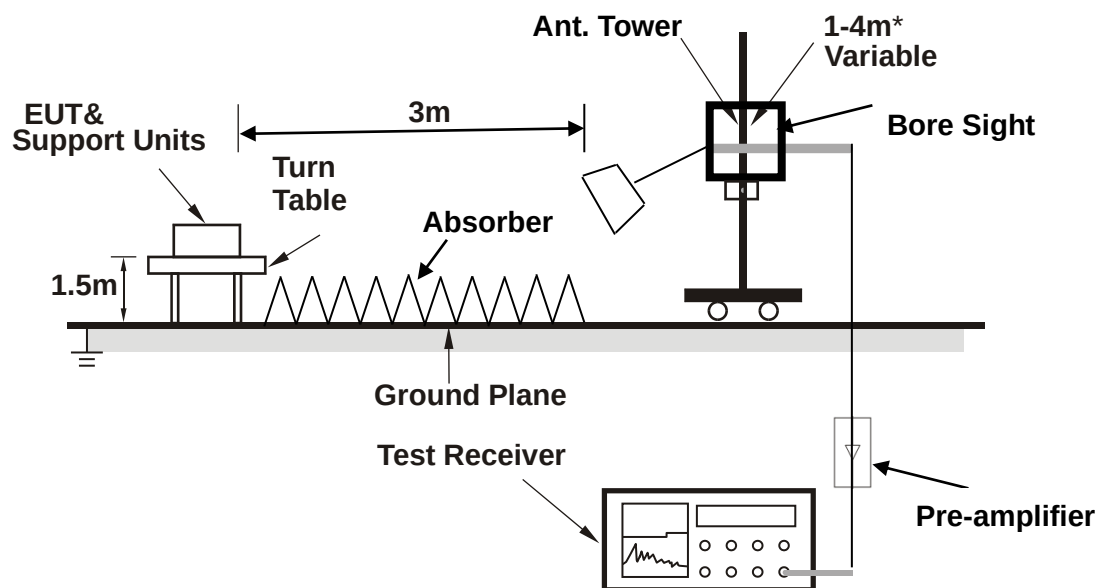
< Frequency Range below 30MHz >



< 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).

3.2.5 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

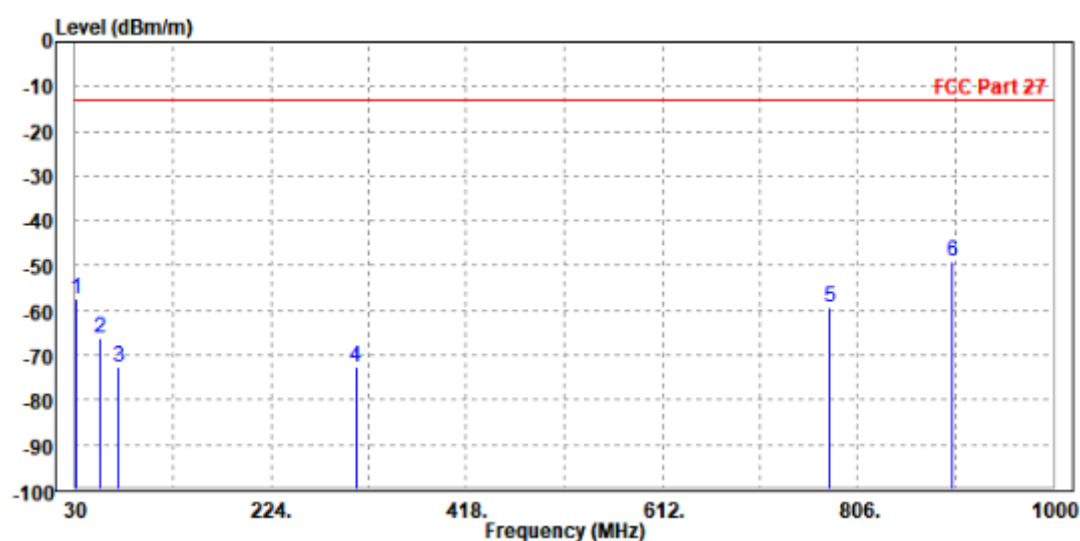
30 MHz – 1GHz data:

LTE Band 13

CHANNEL BANDWIDTH: 5MHz / QPSK

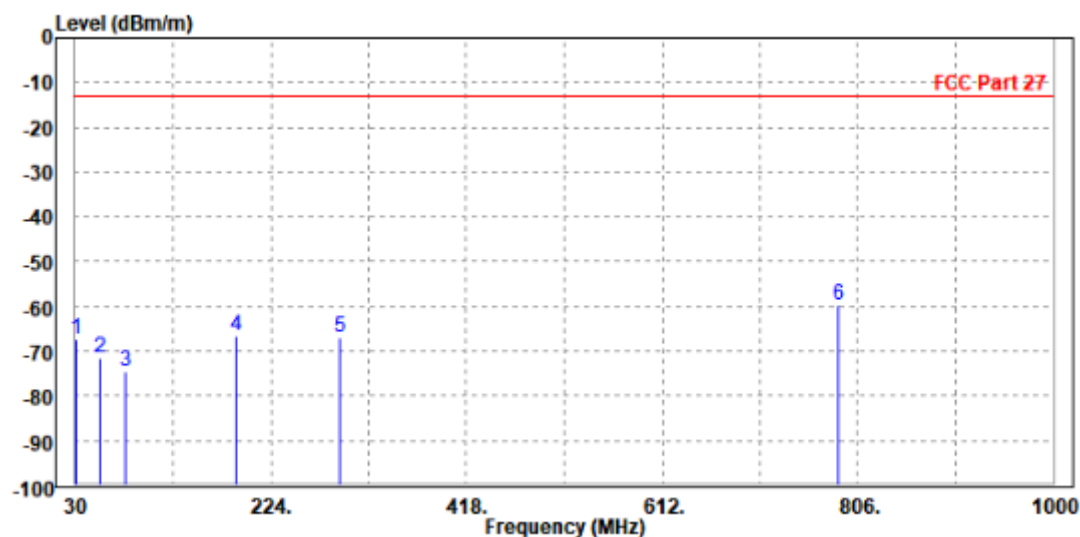
MODE	TX channel 23255	FREQUENCY RANGE	Below 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	Battery(x12AA) 6V
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	30.970	-57.29	-54.78	-13.00	-44.29	-2.51	Peak	Horizontal
2	54.250	-66.34	-54.60	-13.00	-53.34	-11.74	Peak	Horizontal
3	72.680	-72.63	-60.28	-13.00	-59.63	-12.35	Peak	Horizontal
4	308.390	-72.60	-63.96	-13.00	-59.60	-8.64	Peak	Horizontal
5	777.870	-59.23	-64.20	-13.00	-46.23	4.97	Peak	Horizontal
6 PP	900.090	-49.23	-49.65	-13.00	-36.23	0.42	Peak	Horizontal



MODE	TX channel 23255	FREQUENCY RANGE	Below 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	Battery(x12AA) 6V
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	30.970	-67.38	-45.83	-13.00	-54.38	-21.55	Peak	Vertical
2	54.250	-71.50	-51.93	-13.00	-58.50	-19.57	Peak	Vertical
3	79.470	-74.59	-55.54	-13.00	-61.59	-19.05	Peak	Vertical
4	189.080	-66.53	-59.65	-13.00	-53.53	-6.88	Peak	Vertical
5	291.900	-67.11	-63.65	-13.00	-54.11	-3.46	Peak	Vertical
6 PP	786.600	-59.55	-63.90	-13.00	-46.55	4.35	Peak	Vertical





**BUREAU
VERITAS**

Test Report No.: W7L-240510W001RF03

ABOVE 1GHz

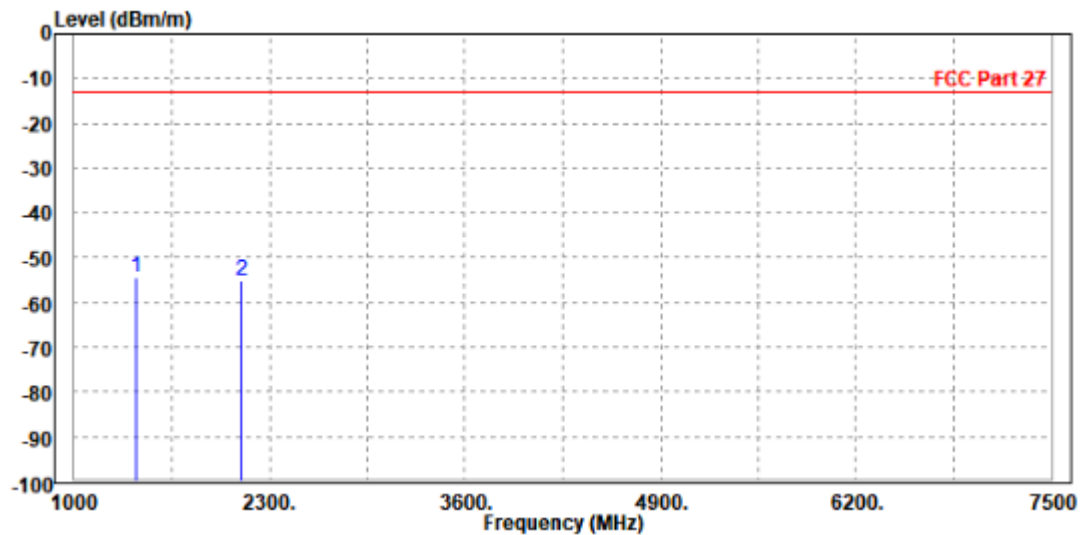
Note: For higher frequency, the emission is too low to be detected.

LTE BAND 12

CHANNEL BANDWIDTH: 1.4MHz / QPSK

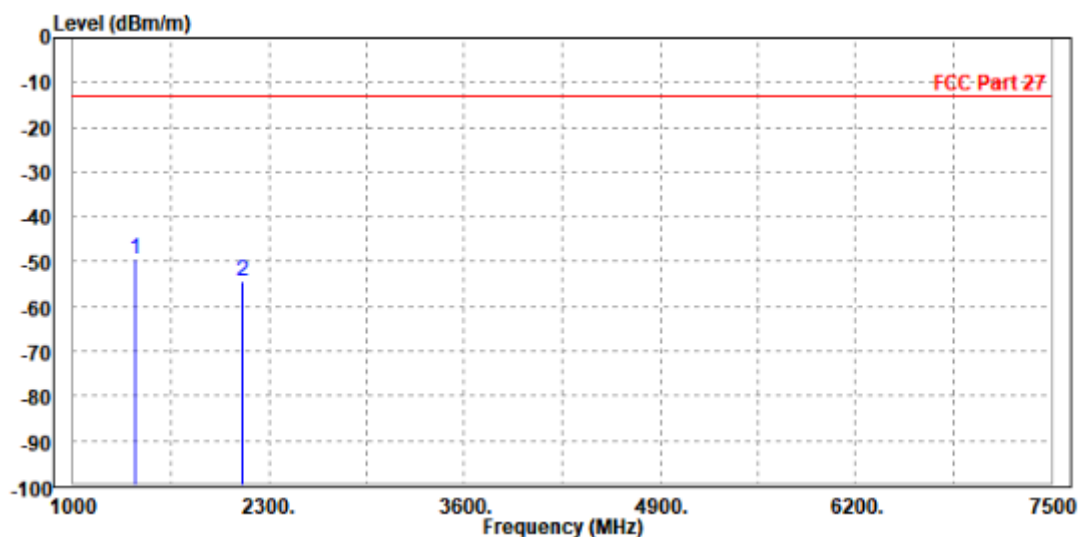
MODE	TX channel 23095	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	Battery(x12AA) 6V
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP	1414.000	-54.52	-57.46	-13.00	-41.52	2.94	Peak	Horizontal
2		2118.000	-55.06	-60.13	-13.00	-42.06	5.07	Peak	Horizontal



MODE	TX channel 23095	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	Battery(x12AA) 6V
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	1416.000	-49.33	-52.26	-13.00	-36.33	2.93	Peak	Vertical
2		2121.000	-54.47	-58.90	-13.00	-41.47	4.43	Peak	Vertical





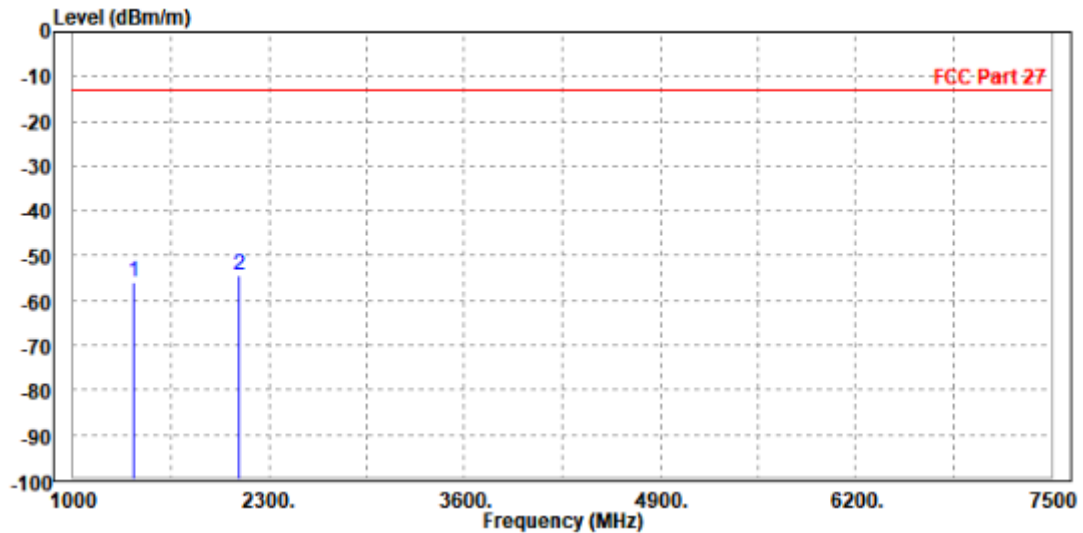
**BUREAU
VERITAS**

Test Report No.: W7L-240510W001RF03

CHANNEL BANDWIDTH: 3MHz / QPSK
CH23025

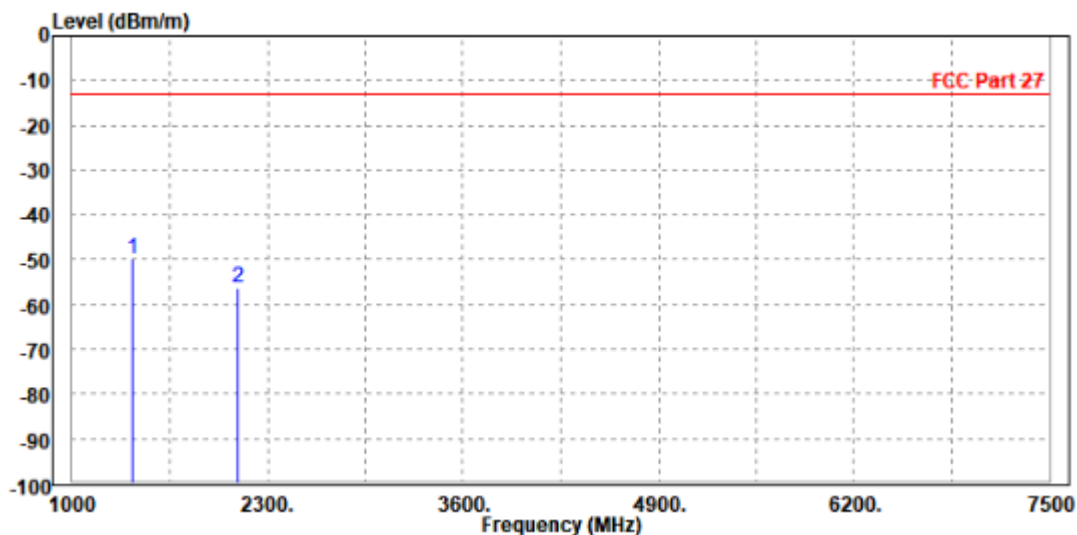
MODE	TX channel 23025	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	Battery(x12AA) 6V
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	1403.000	-55.91	-58.81	-13.00	-42.91	2.90	Peak	Horizontal
2 PP	2102.000	-54.35	-59.38	-13.00	-41.35	5.03	Peak	Horizontal



MODE	TX channel 23025	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	Battery(x12AA) 6V
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

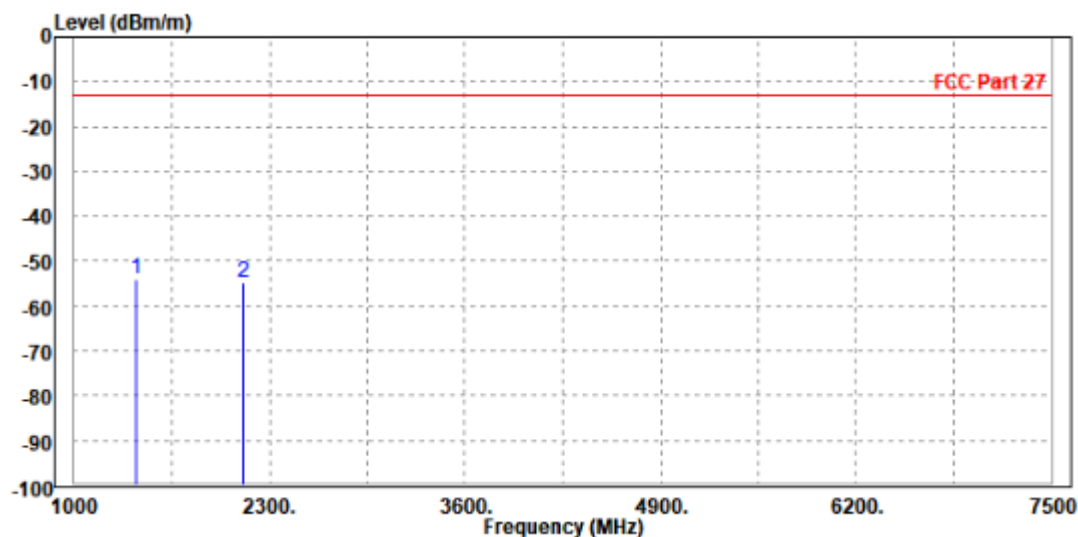
		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP	1396.500	-49.86	-52.74	-13.00	-36.86	2.88	Peak	Vertical
2		2105.000	-56.25	-60.62	-13.00	-43.25	4.37	Peak	Vertical



CH23095

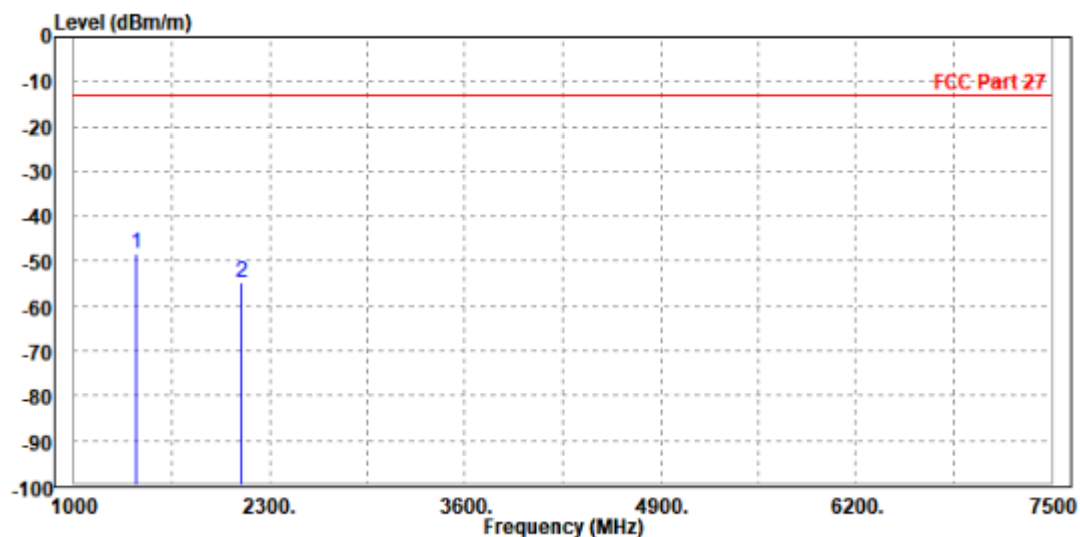
MODE	TX channel 23095	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	Battery(x12AA) 6V
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP	1416.000	-53.99	-56.93	-13.00	-40.99	2.94	Peak	Horizontal
2		2121.000	-54.83	-59.91	-13.00	-41.83	5.08	Peak	Horizontal



MODE	TX channel 23095	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	Battery(x12AA) 6V
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

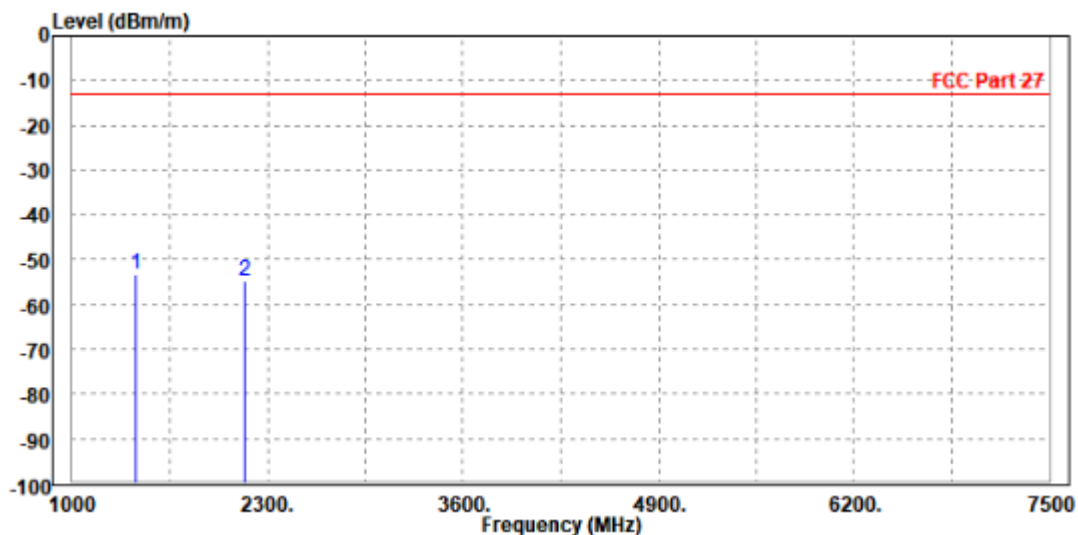
		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP	1414.000	-48.12	-51.04	-13.00	-35.12	2.92	Peak	Vertical
2		2118.000	-54.71	-59.13	-13.00	-41.71	4.42	Peak	Vertical



CH23165

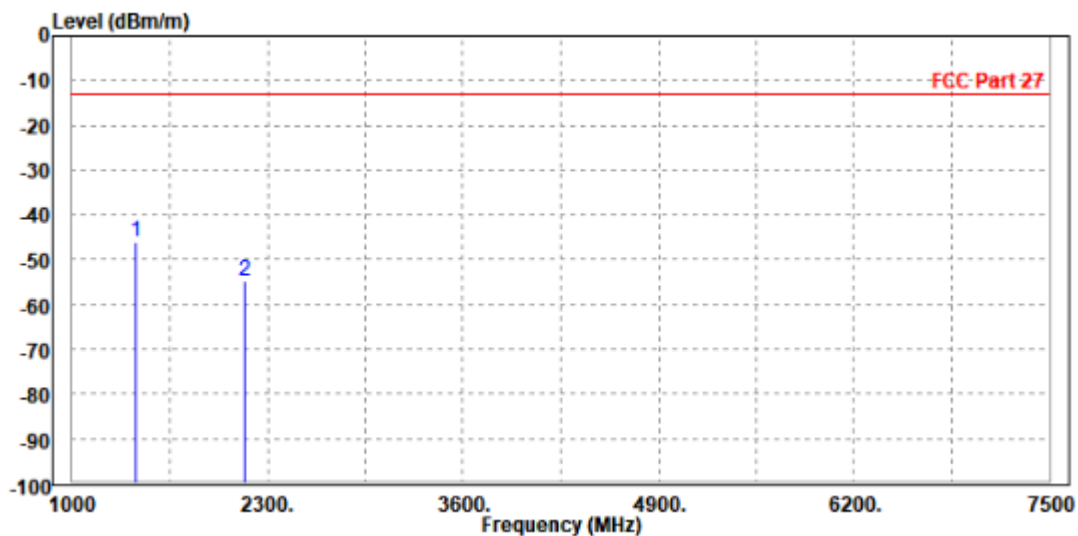
MODE	TX channel 23165	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	Battery(x12AA) 6V
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP 1429.000	-53.15	-56.13	-13.00	-40.15	2.98	Peak	Horizontal
2	2144.000	-54.72	-59.86	-13.00	-41.72	5.14	Peak	Horizontal



MODE	TX channel 23165	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	Battery(x12AA) 6V
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

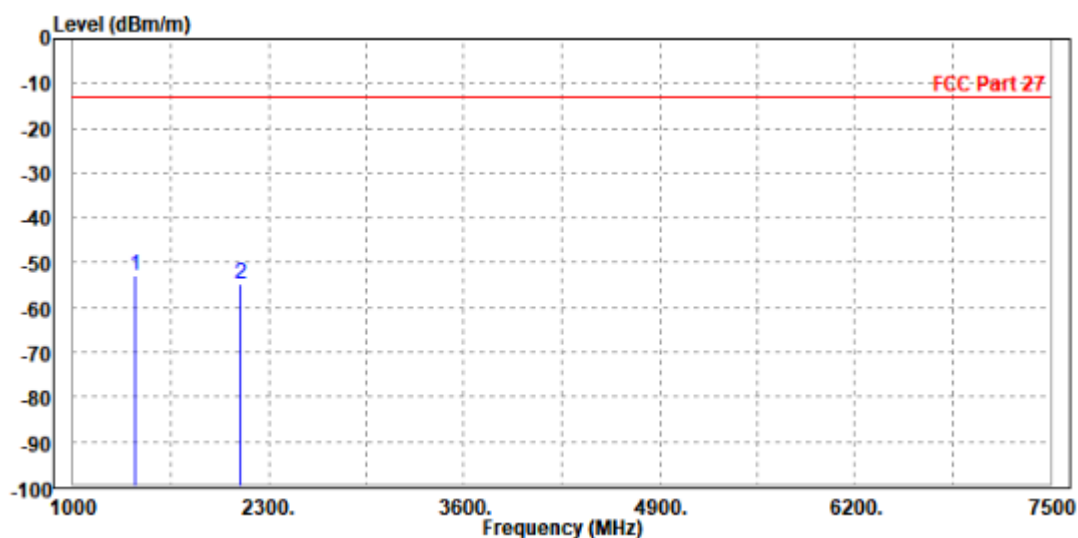
		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP	1429.000	-45.86	-48.82	-13.00	-32.86	2.96	Peak	Vertical
2		2143.500	-54.89	-59.40	-13.00	-41.89	4.51	Peak	Vertical



CHANNEL BANDWIDTH: 5MHz / QPSK

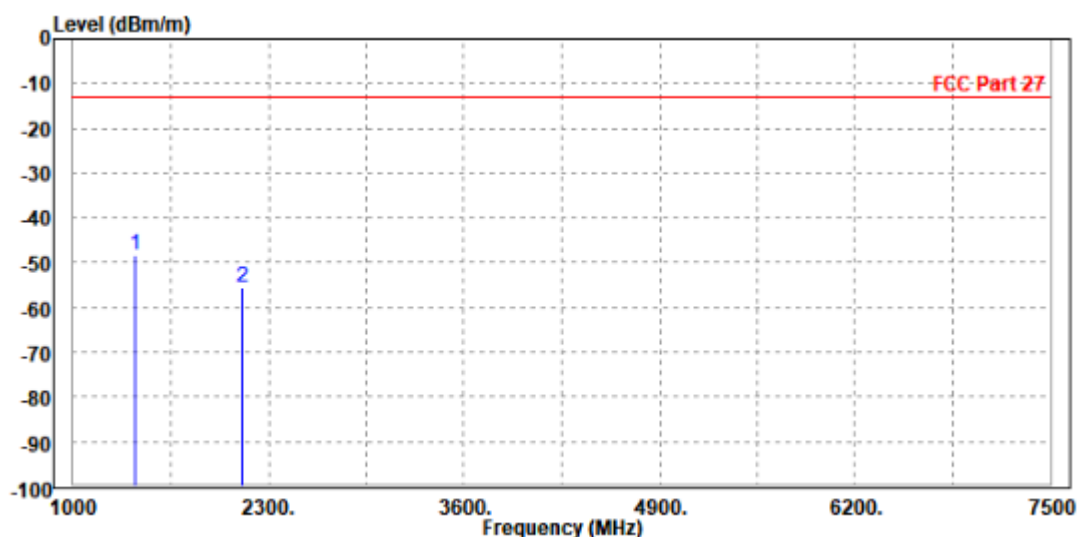
MODE	TX channel 23095	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	Battery(x12AA) 6V
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP	1409.500	-52.74	-55.66	-13.00	-39.74	2.92	Peak	Horizontal
2		2118.000	-54.63	-59.70	-13.00	-41.63	5.07	Peak	Horizontal



MODE	TX channel 23095	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	Battery(x12AA) 6V
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	1409.500	-48.25	-51.16	-13.00	-35.25	2.91	Peak	Vertical
2		2121.000	-55.35	-59.78	-13.00	-42.35	4.43	Peak	Vertical



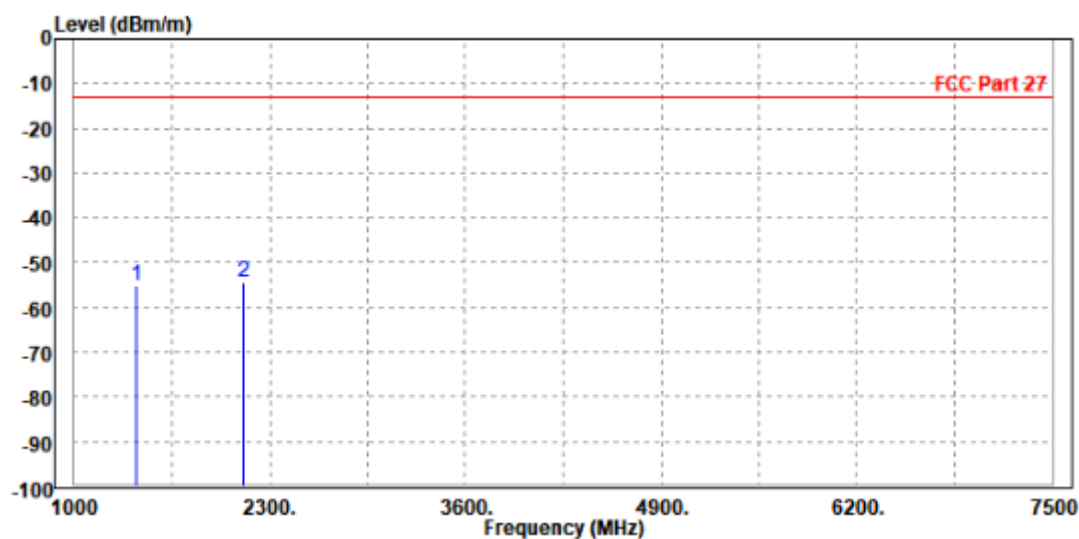


Test Report No.: W7L-240510W001RF03

CHANNEL BANDWIDTH: 10MHz / QPSK

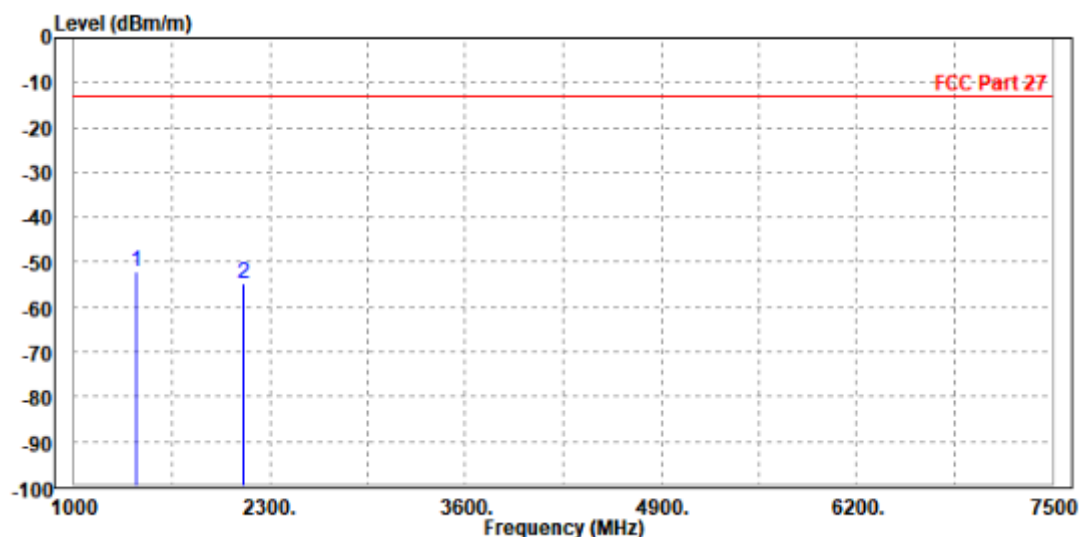
MODE	TX channel 23095	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	Battery(x12AA) 6V
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	1416.000	-55.00	-57.94	-13.00	-42.00	2.94	Peak	Horizontal
2 PP	2121.000	-54.47	-59.55	-13.00	-41.47	5.08	Peak	Horizontal



MODE	TX channel 23095	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	Battery(x12AA) 6V
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	1416.000	-51.98	-54.91	-13.00	-38.98	2.93	Peak	Vertical
2	2121.000	-54.92	-59.35	-13.00	-41.92	4.43	Peak	Vertical



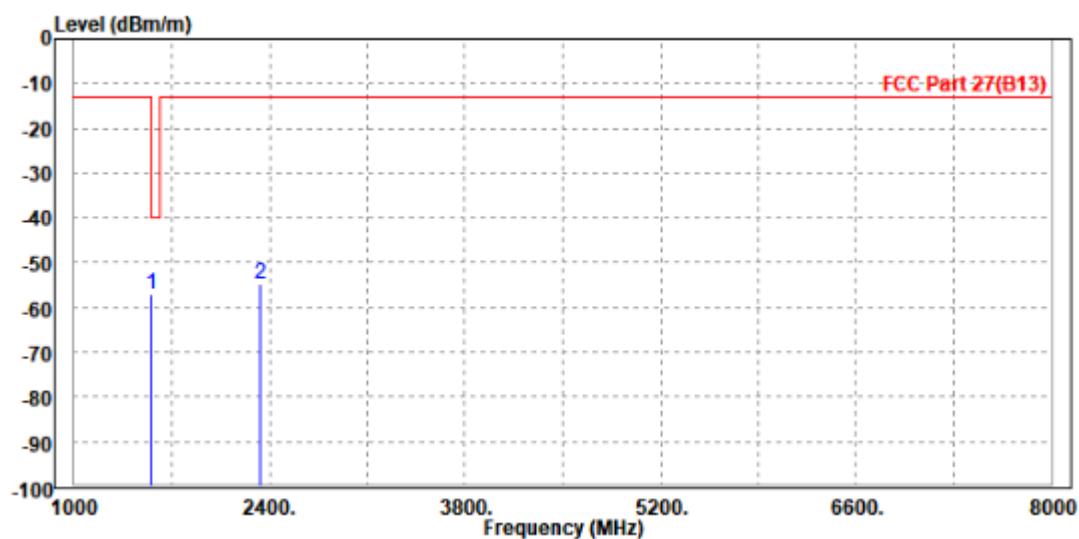
LTE B13

CHANNEL BANDWIDTH: 5MHz / QPSK

CH 23205

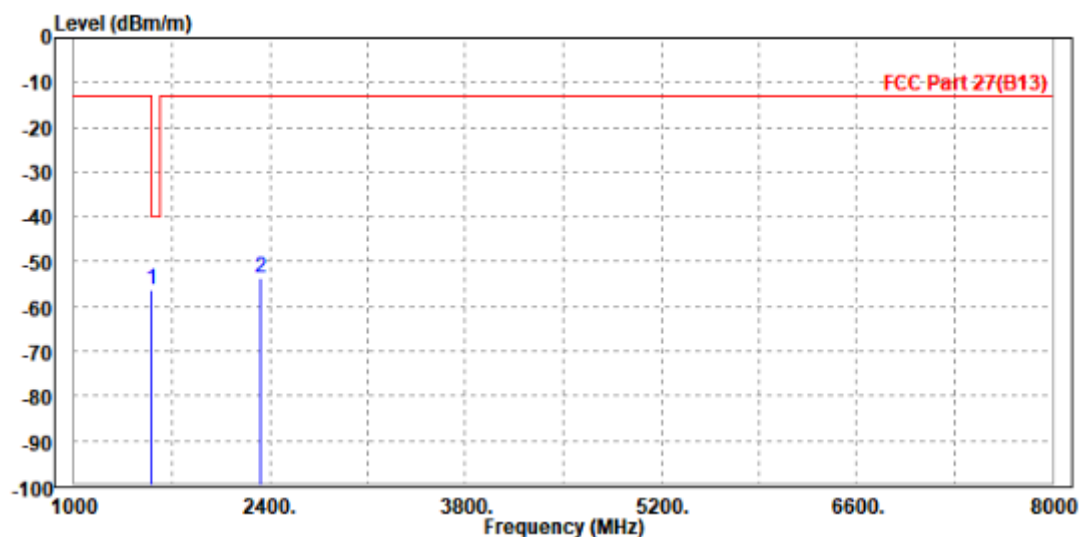
MODE	TX channel 23205	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	Battery(x12AA) 6V
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP	1560.000	-56.97	-60.36	-40.00	-16.97	3.39	Peak	Horizontal
2		2338.500	-54.62	-60.28	-13.00	-41.62	5.66	Peak	Horizontal



MODE	TX channel 23205	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	Battery(x12AA) 6V
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	1559.000	-56.24	-59.47	-40.00	-16.24	3.23	Peak	Vertical
2	2337.000	-53.45	-58.65	-13.00	-40.45	5.20	Peak	Vertical





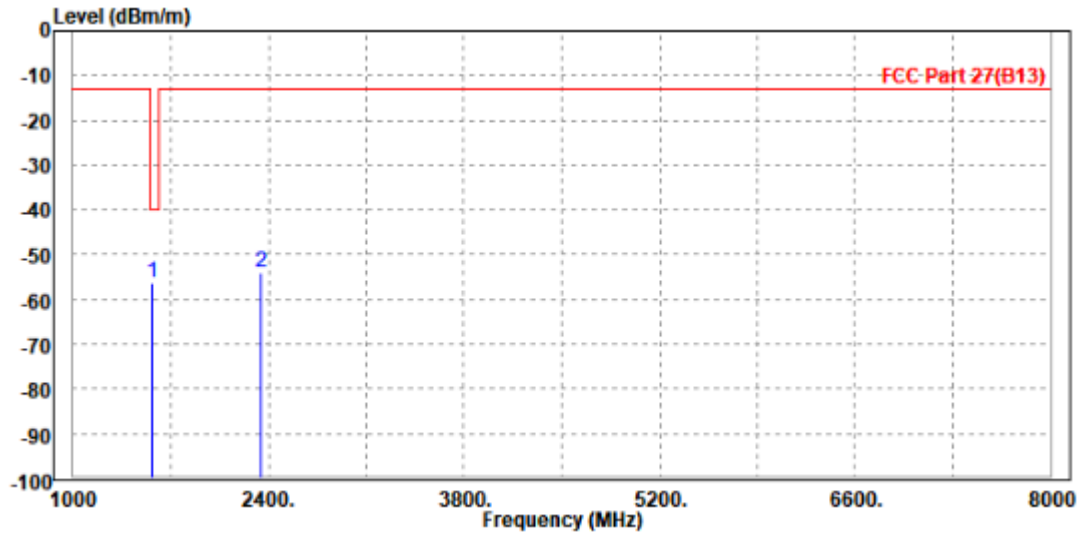
BUREAU
VERITAS

Test Report No.: W7L-240510W001RF03

CH 23230

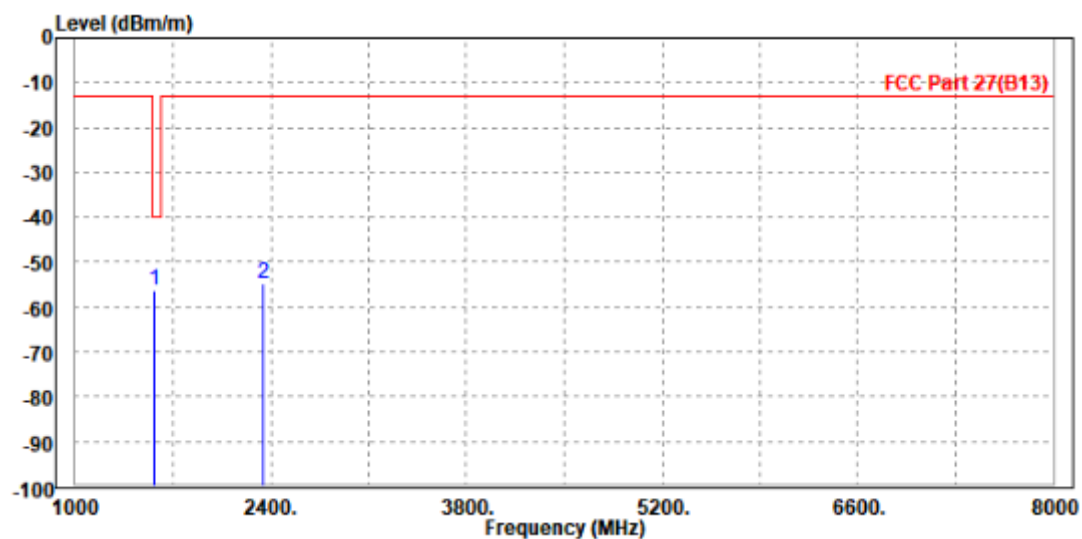
MODE	TX channel 23230	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	Battery(x12AA) 6V
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP	1567.000	-56.30	-59.71	-40.00	-16.30	3.41	Peak	Horizontal
2		2346.000	-54.10	-59.78	-13.00	-41.10	5.68	Peak	Horizontal



MODE	TX channel 23230	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	Battery(x12AA) 6V
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	1564.000	-56.17	-59.41	-40.00	-16.17	3.24	Peak	Vertical
2		2344.000	-54.84	-60.06	-13.00	-41.84	5.22	Peak	Vertical





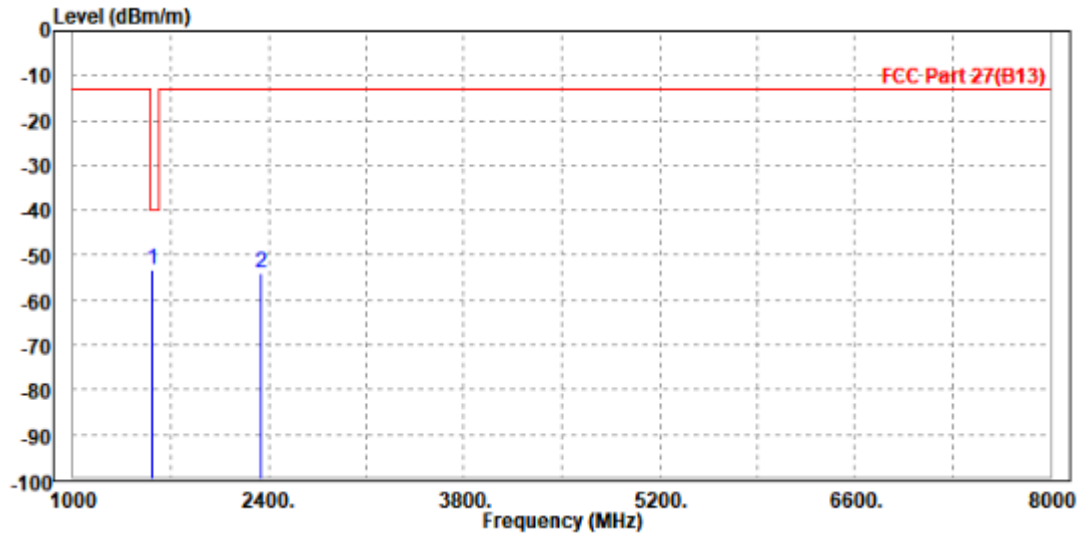
BUREAU
VERITAS

Test Report No.: W7L-240510W001RF03

CH 23255

MODE	TX channel 23255	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	Battery(x12AA) 6V
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	1569.000	-53.10	-56.51	-40.00	-13.10	3.41	Peak	Horizontal
2		2351.000	-53.81	-59.51	-13.00	-40.81	5.70	Peak	Horizontal

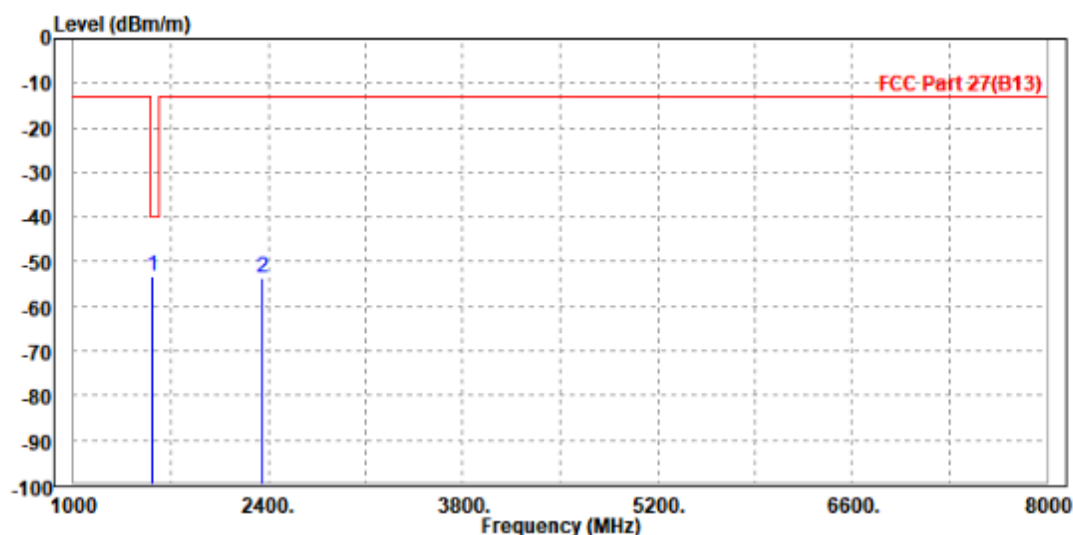




Test Report No.: W7L-240510W001RF03

MODE	TX channel 23255	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	Battery(x12AA) 6V
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

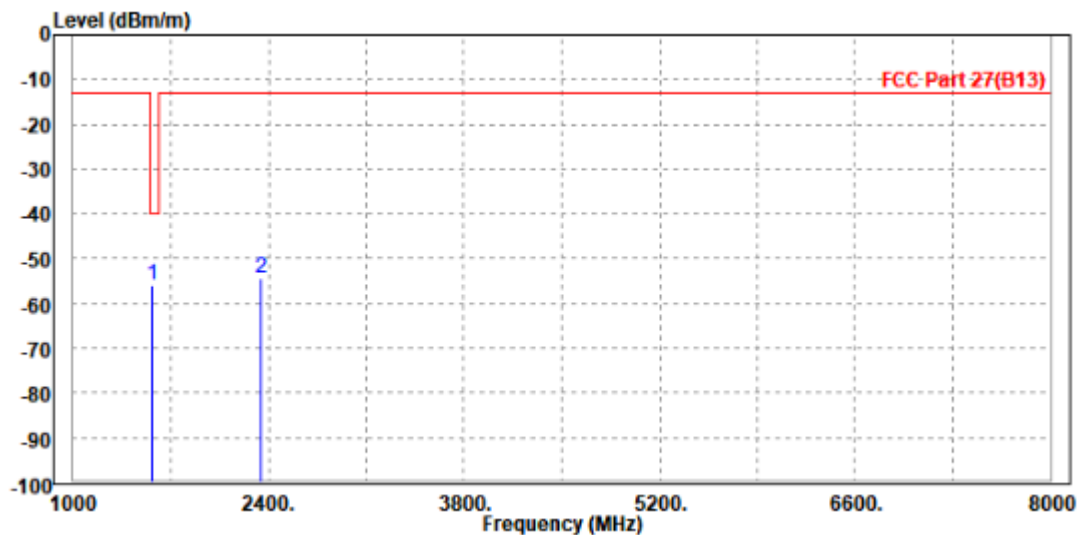
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1 PP	1567.000	-53.23	-56.48	-40.00	-13.23	3.25	Peak	Vertical
2	2353.500	-53.74	-59.00	-13.00	-40.74	5.26	Peak	Vertical



CHANNEL BANDWIDTH: 10MHz /QPSK

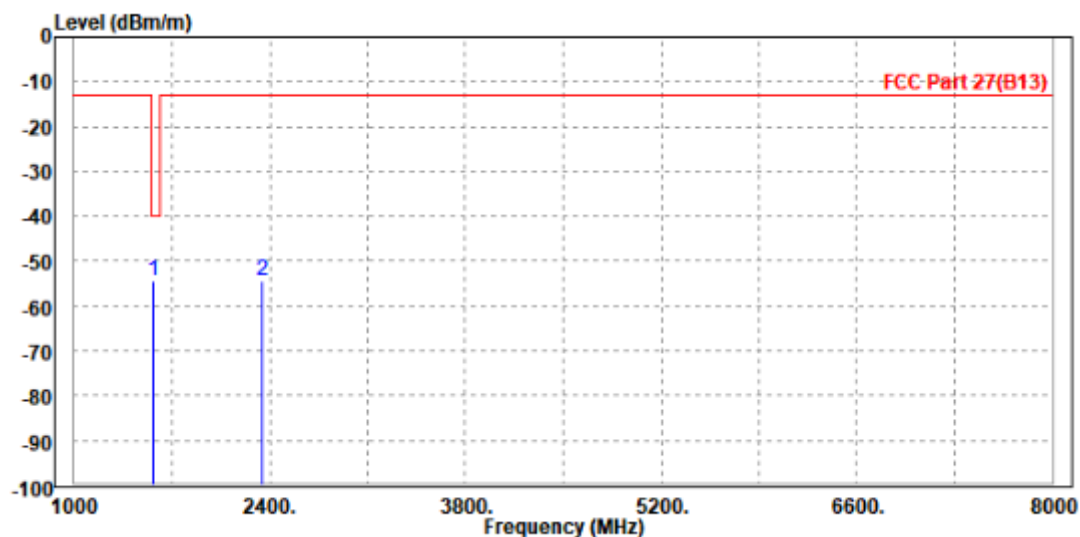
MODE	TX channel 23230	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	Battery(x12AA) 6V
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP	1564.000	-56.07	-59.47	-40.00	-16.07	3.40	Peak	Horizontal
2		2344.000	-54.37	-60.05	-13.00	-41.37	5.68	Peak	Horizontal



MODE	TX channel 23230	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	Battery(x12AA) 6V
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	1567.000	-54.23	-57.48	-40.00	-14.23	3.25	Peak	Vertical
2		2346.000	-54.34	-59.57	-13.00	-41.34	5.23	Peak	Vertical

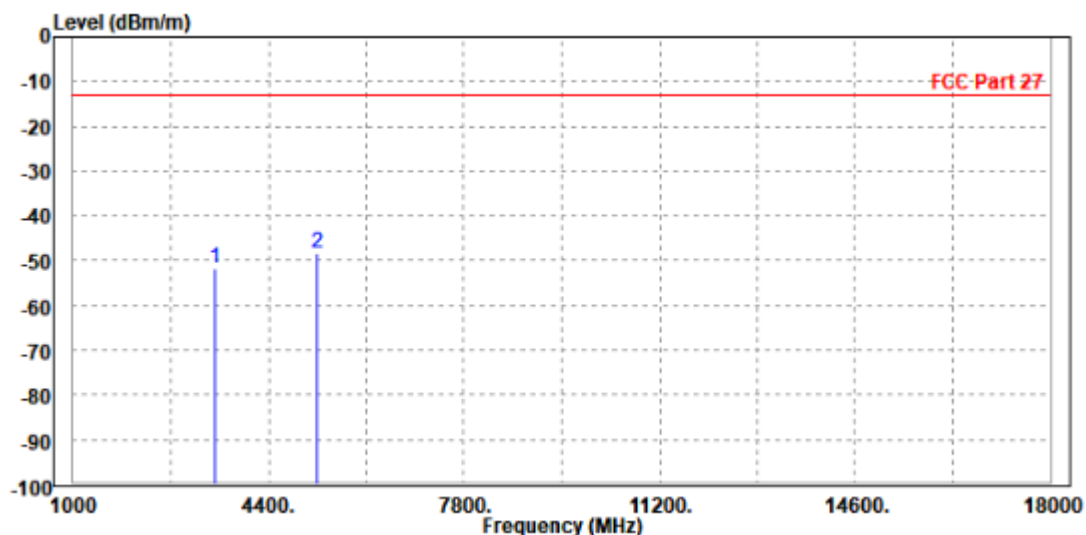


LTE B66

CHANNEL BANDWIDTH: 1.4MHz / QPSK

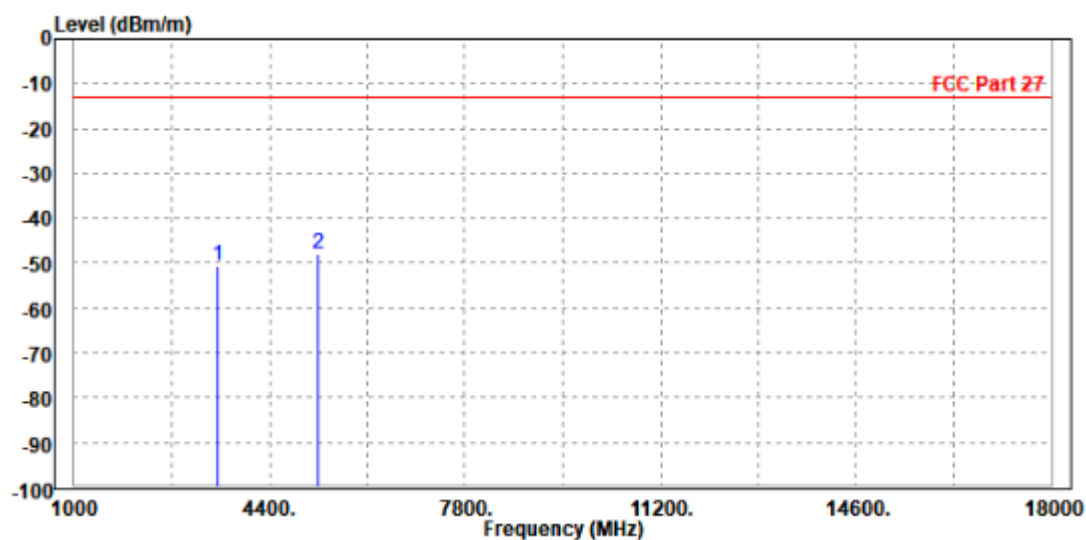
MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	Battery(x12AA) 6V
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3482.000	-51.80	-60.35	-13.00	-38.80	8.55	Peak	Horizontal
2 PP	5235.000	-48.14	-59.55	-13.00	-35.14	11.41	Peak	Horizontal



MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	Battery(x12AA) 6V
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

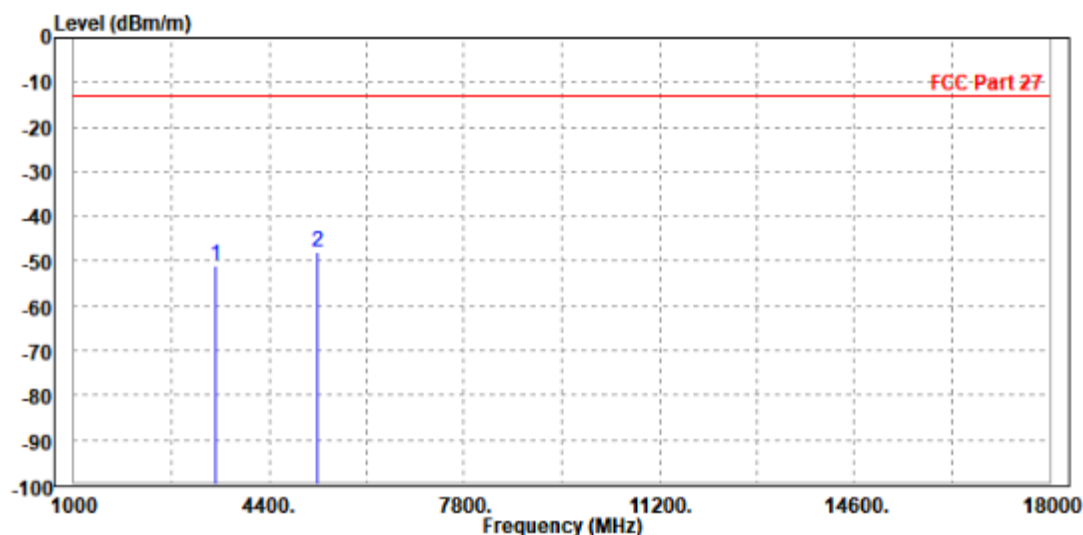
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3490.000	-50.59	-59.23	-13.00	-37.59	8.64	Peak	Vertical
2 PP	5233.000	-47.82	-59.64	-13.00	-34.82	11.82	Peak	Vertical



CHANNEL BANDWIDTH: 3MHz / QPSK

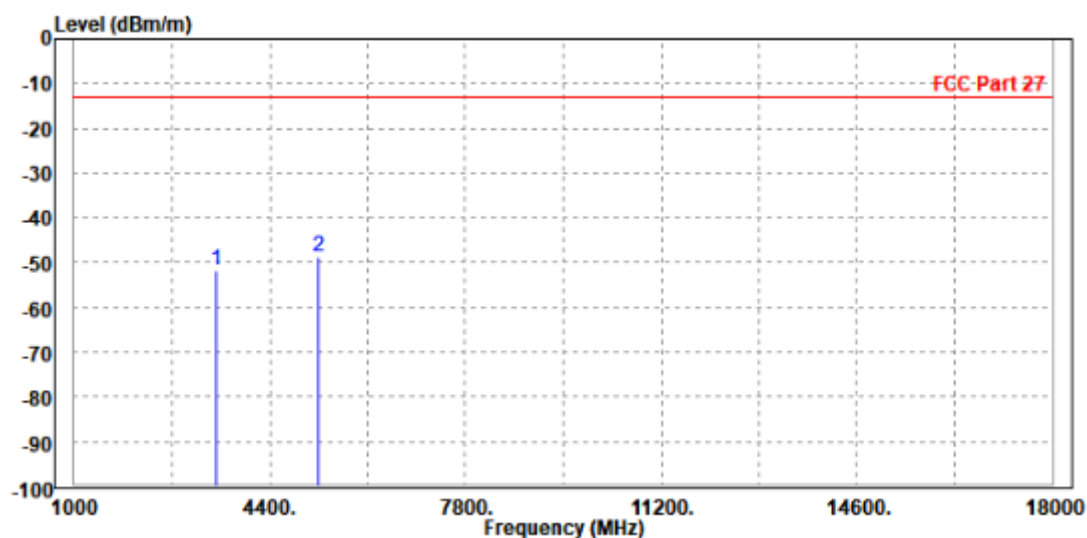
MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	Battery(x12AA) 6V
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3482.000	-51.01	-59.56	-13.00	-38.01	8.55	Peak	Horizontal
2 PP	5235.000	-47.82	-59.23	-13.00	-34.82	11.41	Peak	Horizontal



MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	Battery(x12AA) 6V
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

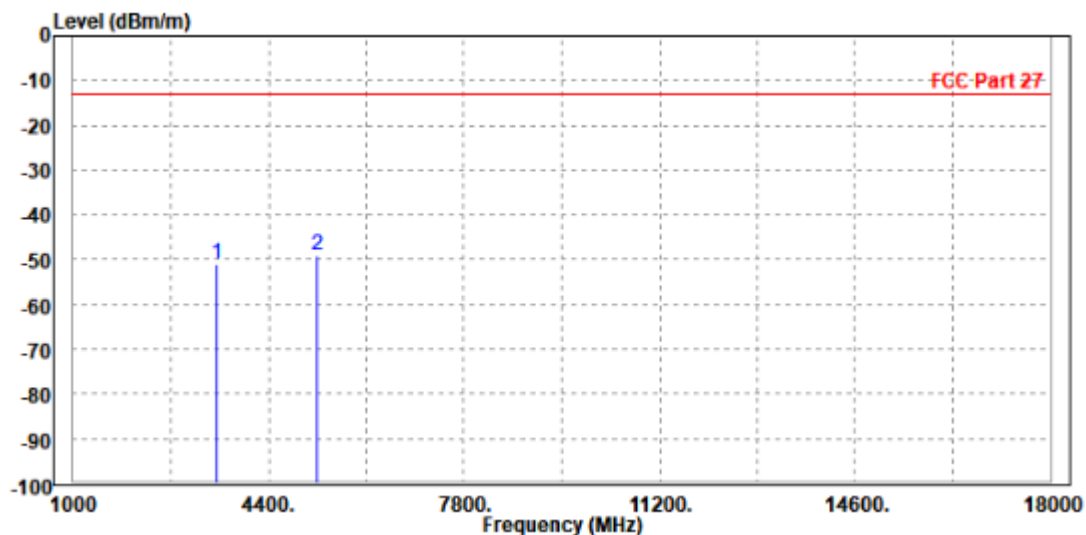
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3482.000	-51.78	-60.43	-13.00	-38.78	8.65	Peak	Vertical
2 PP	5235.000	-48.56	-60.39	-13.00	-35.56	11.83	Peak	Vertical



CHANNEL BANDWIDTH: 5MHz / QPSK

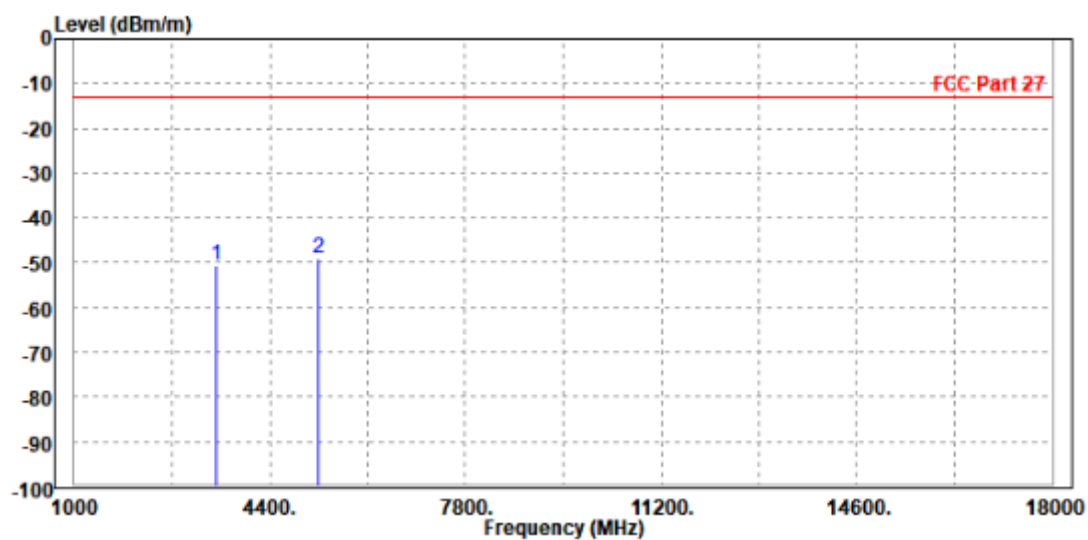
MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	Battery(x12AA) 6V
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3490.000	-51.07	-59.62	-13.00	-38.07	8.55	Peak	Horizontal
2 PP	5233.000	-49.13	-60.53	-13.00	-36.13	11.40	Peak	Horizontal



MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	Battery(x12AA) 6V
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	3482.000	-50.73	-59.38	-13.00	-37.73	8.65	Peak	Vertical
2 PP	5235.000	-48.96	-60.79	-13.00	-35.96	11.83	Peak	Vertical

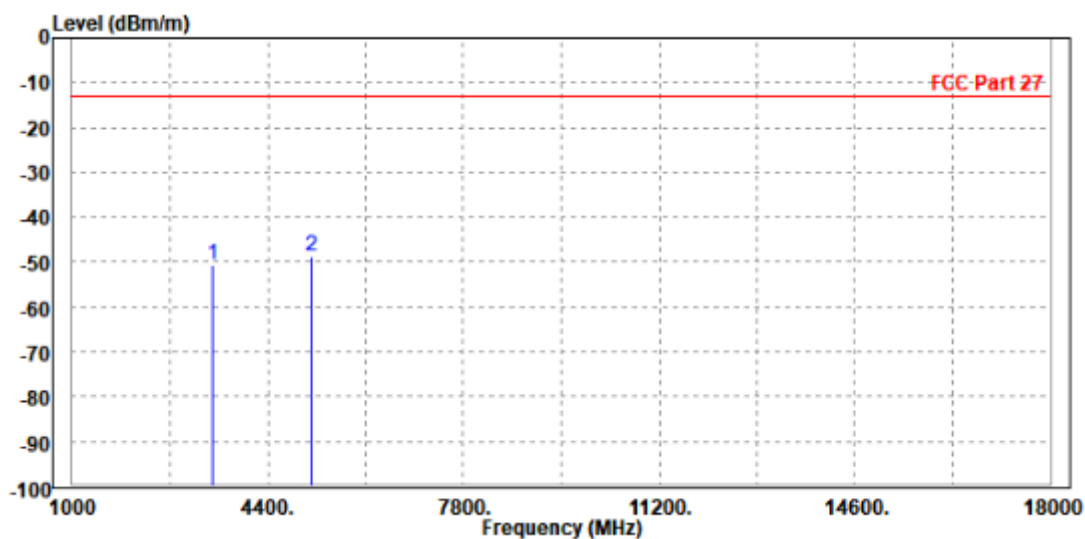


CHANNEL BANDWIDTH: 10MHz / QPSK

CH132022

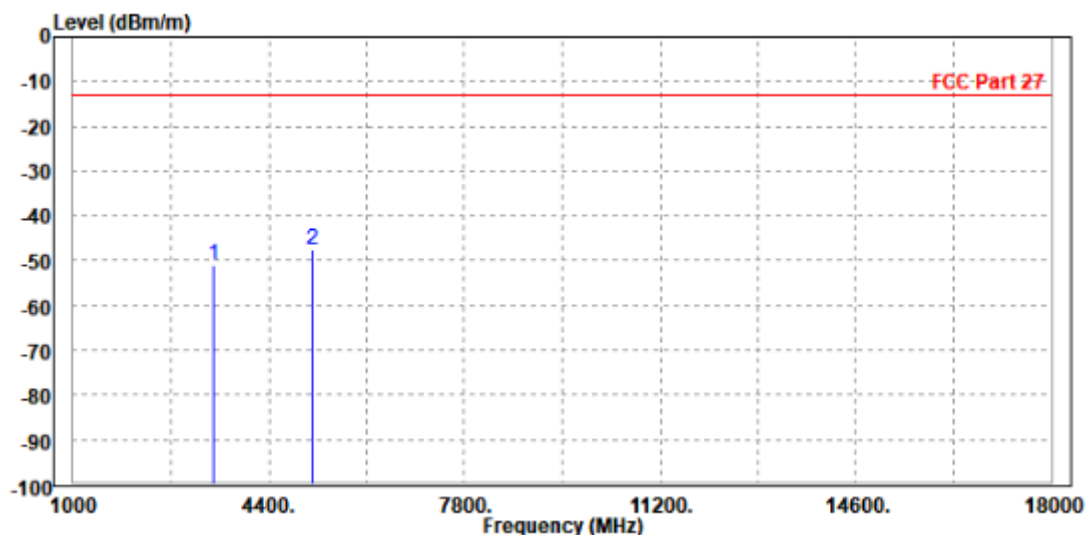
MODE	TX channel 132022	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	Battery(x12AA) 6V
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3431.000	-50.72	-59.24	-13.00	-37.72	8.52	Peak	Horizontal
2 PP	5145.000	-48.69	-59.96	-13.00	-35.69	11.27	Peak	Horizontal



MODE	TX channel 132022	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	Battery(x12AA) 6V
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	3430.000	-50.81	-59.48	-13.00	-37.81	8.67	Peak	Vertical
2 PP	5148.000	-47.58	-59.24	-13.00	-34.58	11.66	Peak	Vertical



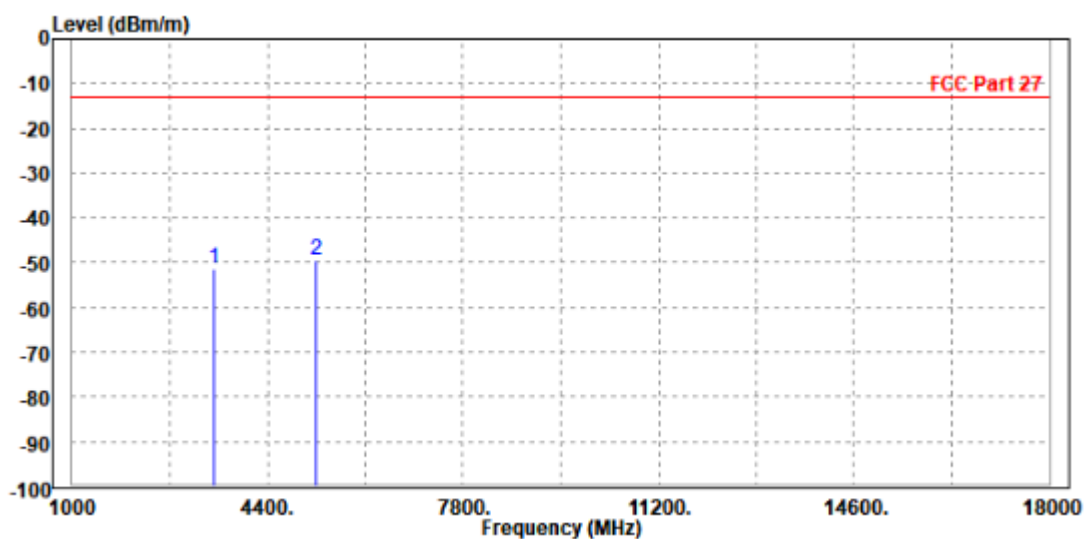


Test Report No.: W7L-240510W001RF03

CH132322

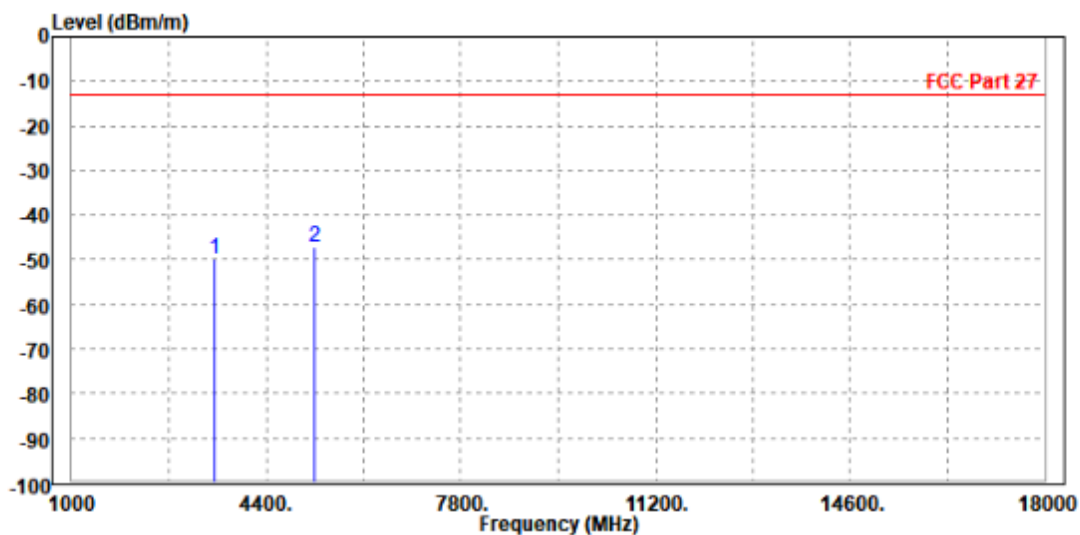
MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	Battery(x12AA) 6V
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3482.000	-51.50	-60.05	-13.00	-38.50	8.55	Peak	Horizontal
2 PP	5235.000	-49.36	-60.77	-13.00	-36.36	11.41	Peak	Horizontal



MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	Battery(x12AA) 6V
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

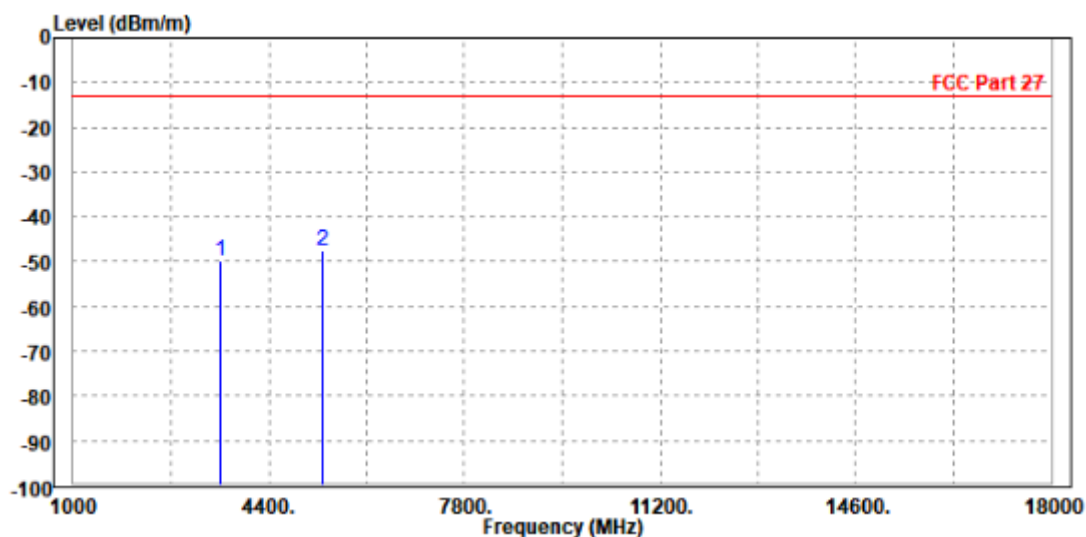
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3490.000	-49.75	-58.39	-13.00	-36.75	8.64	Peak	Vertical
2 PP	5233.000	-47.03	-58.85	-13.00	-34.03	11.82	Peak	Vertical



CH132622

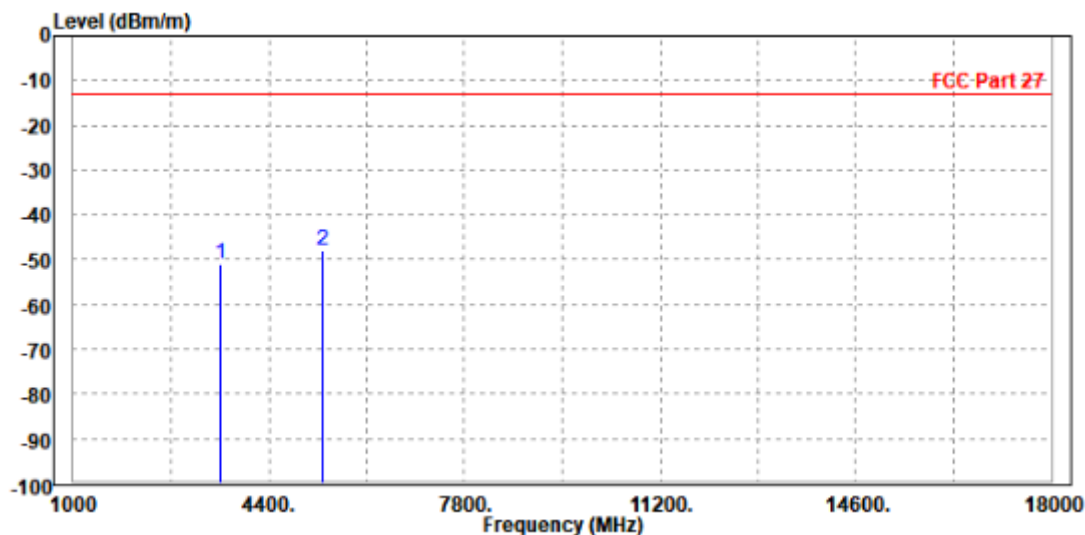
MODE	TX channel 132622	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	Battery(x12AA) 6V
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3550.000	-49.72	-58.24	-13.00	-36.72	8.52	Peak	Horizontal
2 PP	5318.000	-47.36	-58.89	-13.00	-34.36	11.53	Peak	Horizontal



MODE	TX channel 132622	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	Battery(x12AA) 6V
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

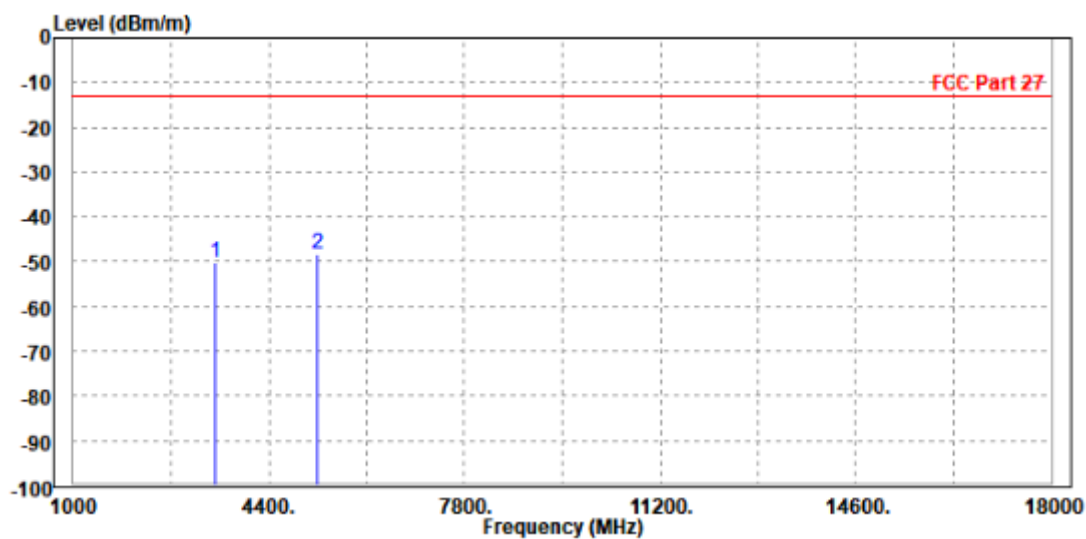
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3550.000	-50.82	-59.46	-13.00	-37.82	8.64	Peak	Vertical
2 PP	5325.000	-47.78	-59.78	-13.00	-34.78	12.00	Peak	Vertical



CHANNEL BANDWIDTH: 15MHz / QPSK

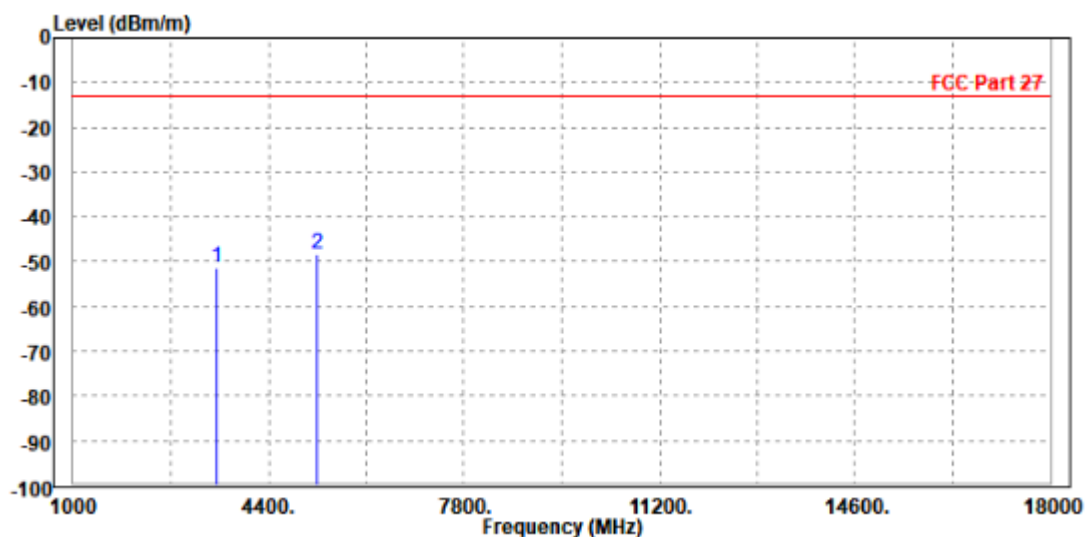
MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	Battery(x12AA) 6V
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3482.000	-50.35	-58.90	-13.00	-37.35	8.55	Peak	Horizontal
2 PP	5235.000	-48.43	-59.84	-13.00	-35.43	11.41	Peak	Horizontal



MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	Battery(x12AA) 6V
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

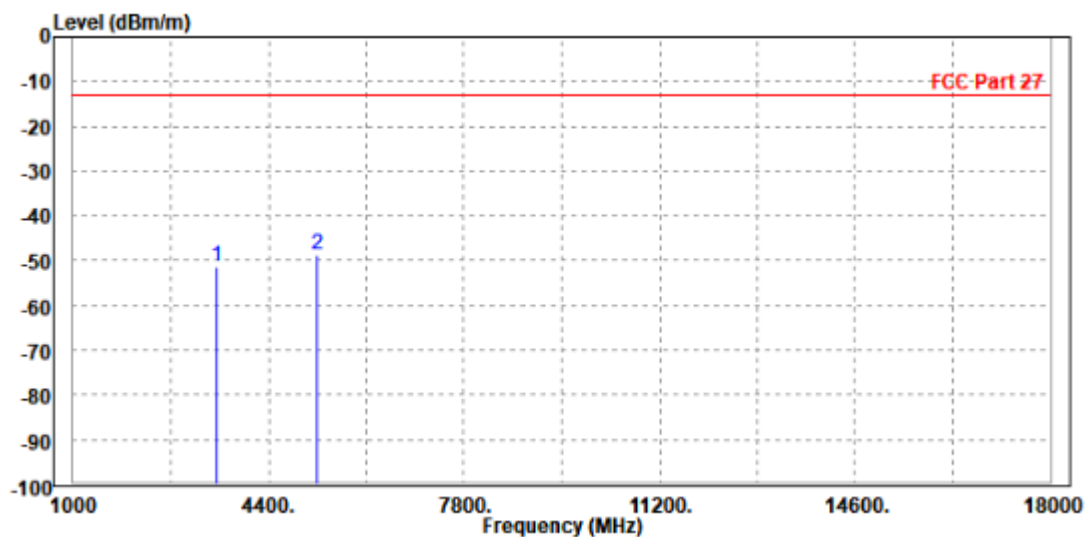
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3490.000	-51.24	-59.88	-13.00	-38.24	8.64	Peak	Vertical
2 PP	5233.000	-48.24	-60.06	-13.00	-35.24	11.82	Peak	Vertical



CHANNEL BANDWIDTH: 20MHz / QPSK

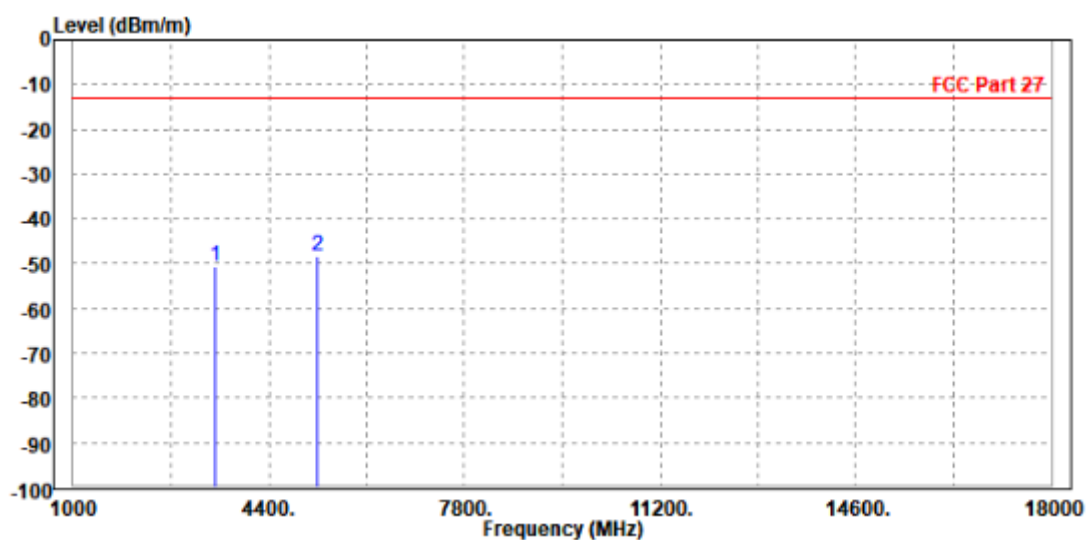
MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	Battery(x12AA) 6V
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3490.000	-51.29	-59.84	-13.00	-38.29	8.55	Peak	Horizontal
2 PP	5233.000	-48.78	-60.18	-13.00	-35.78	11.40	Peak	Horizontal



MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	Battery(x12AA) 6V
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	3482.000	-50.54	-59.19	-13.00	-37.54	8.65	Peak	Vertical
2 PP	5235.000	-48.14	-59.97	-13.00	-35.14	11.83	Peak	Vertical





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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.



Test Report No.: W7L-240510W001RF03

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--