FCC TEST REPORT

(PART 27)

Applicant:	COOSEA GROUP (HK) COMPANY LIMITED
Address:	UNIT 5-6 16/F MULTIFIELD PLAZA 3-7A PRAT AVENUE TSIMSHATSUI KL, HONG KONG, CHINA

Manufacturer or Supplier:	COOSEA GROUP (HK) COMPANY LIMITED
Address:	UNIT 5-6 16/F MULTIFIELD PLAZA 3-7A PRAT AVENUE TSIMSHATSUI KL, HONG KONG, CHINA
Product:	LTE Smartphone
Brand Name:	Cricket
Model Name:	SL100EA
FCC ID:	2A28USL100EA
Date of tests:	Oct. 27, 2021 ~ Dec. 23, 2021

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

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

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

Prepared by Simon Wang Engineer / Mobile Department	Approved by Luke Lu Manager / Mobile Department
Simon Date: Dec. 24, 2021	Luke Lu Date: Dec. 24, 2021

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
W7L-P21100025RF06	Original release	Dec. 24, 2021

BV 7Layers Communications Technology (Shenzhen) Co. Ltd
No.B102, Dazu Chuangxin Mansion, North of Beihuan Avenue, North Area, Hi-Tech Industrial Park, Nanshan District, Shenzhen, Guangdong, China
Tel: +86 755 8869 6566
Fax: +86 755 8869 6577
Email: customerservice.sw@bureauveritas.com

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(a)(3) §27.50(d)(4)	Equivalent Isotropically Radiated Power (Band4) (Band30)	Compliance
§27.50(c)(10)	Equivalent Radiated Power (Band12)	
§2.1055 §27.54	Frequency Stability	Compliance
§2.1049	Occupied Bandwidth	Compliance
§2.1051 §27.53(g) §27.53(a)(4) §27.53(h)	Band Edge Measurements	Compliance
§2.1051 §27.53(g) §27.53(h) §27.53(a)(4)	Conducted Spurious Emissions	Compliance
§2.1053 §27.53(g) §27.53(h) §27.53(a)(4)	Radiated Spurious Emissions	Compliance
NA	Peak to average ratio	Compliance

Note: Except the data of RSE and power, other data please refer to APPENDIX

1.1 MEASREMENT UNCERTAINTY

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

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

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

1.2 TEST SITE AND INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
MXE EMI Receiver	KEYSIGHT	N9038A-544	MY54450026	Apr. 22,21	Apr. 21,22
EXA Signal Analyzer	KEYSIGHT	N9010A-544	MY54510355	Jun. 03,21	Jun. 02,22
Loop Antenna	Schwarzbeck	FMZB 1519B	1519B-051	Feb. 14.20	Feb. 13.23
Bilog Antenna	ETS-LINDGREN	3143B	00161965	Mar. 05,21	Mar. 04,22
Horn Antenna	ETS-LINDGREN	3117	00168692	Apr. 02,21	Apr. 01,22
Horn Antenna (18GHz-40GHz)	N/A	QWH-SL-18-40-K-SG/QMS-00361	15433	Aug. 25, 21	Aug. 24, 22
Radio Communication Analyzer	ANRITSU	MT8820C	6201465426	Feb. 25,21	Feb. 24,22
Signal Pre-Amplifier	EMSI	EMC 9135	980249	Jun. 02,21	Jun. 01,22
Signal Pre-Amplifier	EMSI	EMC 012645B	980257	Jun. 03,21	Jun. 02,22
Signal Pre-Amplifier	EMSI	EMC 184045B	980259	Apr. 22,21	Apr. 21,22
3m Semi-anechoic Chamber	ETS-LINDGREN	9m*6m*6m	Euroshieldpn-CT0001143-1216	May. 19,20	May. 18,23
Test Software	E3	V 9.160323	N/A	N/A	N/A
Test Software	ADT	ADT_Radiated_V 7.6.15.9.2	N/A	N/A	N/A
10dB Attenuator	JFW/USA	50HF-010-SMA	1505	Jun. 03,21	Jun. 02,22
Power Meter	Anritsu	ML2495A	1506002	Apr. 07,21	Apr. 06,22
Power Sensor	Anritsu	MA2411B	1339352	May. 07,21	May. 06,22
Temperature Chamber	ESPEC	SH-242	93000855	Jun. 02,21	Jun. 01,22
MXG Analog Microvave Signal Generator	KEYSIGHT	N5183A	MY50143024	Mar. 05,21	Mar. 04,22
Power Divider	MCLI/USA	PS2-15	24880	N/A	N/A

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	LTE Smartphone	
BRAND NAME	Cricket	
MODEL NAME	SL100EA	
NOMINAL VOLTAGE	5.0Vdc(adapter or host equipment) 3.85Vdc (Li-ion, battery)	
MODULATION TECHNOLOGY	**LTE**	QPSK, 16QAM, 64QAM
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 30 Channel Bandwidth: 5MHz	2307.5MHz ~ 2312.5MHz
	LTE Band 30 Channel Bandwidth: 10MHz	2310MHz

EMISSION DESIGNATOR	LTE Band 4 Channel Bandwidth: 1.4MHz	QPSK: 1M12G7D
		16QAM: 1M12W7D
		64QAM: 1M12W7D
	LTE Band 4 Channel Bandwidth: 3MHz	QPSK: 2M73G7D
		16QAM: 2M73W7D
		64QAM: 2M74W7D
	LTE Band 4 Channel Bandwidth: 5MHz	QPSK: 4M55G7D
		16QAM: 4M56W7D
		64QAM: 4M54W7D
	LTE Band 4 Channel Bandwidth: 10MHz	QPSK: 9M10G7D
		16QAM: 9M06W7D
		64QAM: 9M09W7D
	LTE Band 4 Channel Bandwidth: 15MHz	QPSK: 13M6G7D
		16QAM: 13M6W7D
		64QAM: 13M6W7D
	LTE Band 4 Channel Bandwidth: 20MHz	QPSK: 18M2G7D
		16QAM: 18M2W7D
		64QAM: 18M1W7D
	LTE Band 12 Channel Bandwidth: 1.4MHz	QPSK: 1M12G7D
		16QAM: 1M12W7D
		64QAM: 1M12W7D
	LTE Band 12 Channel Bandwidth: 3MHz	QPSK: 2M74G7D
		16QAM: 2M73W7D
		64QAM: 2M73W7D
	LTE Band 12 Channel Bandwidth: 5MHz	QPSK: 4M59G7D
		16QAM: 4M60W7D
		64QAM: 4M59W7D
	LTE Band 12 Channel Bandwidth: 10MHz	QPSK: 9M09G7D
		16QAM: 9M12W7D
		64QAM: 9M10W7D
	LTE Band 30 Channel Bandwidth: 5MHz	QPSK: 4M55G7D
		16QAM: 4M56W7D
		64QAM: 4M55W7D
	LTE Band 30 Channel Bandwidth: 10MHz	QPSK: 9M08G7D
		16QAM: 9M06W7D
		64QAM: 9M05W7D
MAX. EIRP POWER	LTE Band 4 Channel Bandwidth: 1.4MHz	231.21mW
	LTE Band 4 Channel Bandwidth: 3MHz	225.94mW

MAX. EIRP POWER	**LTE Band 4 Channel Bandwidth: 5MHz**	225.94mW
	LTE Band 4 Channel Bandwidth: 10MHz	226.46mW
	LTE Band 4 Channel Bandwidth: 15MHz	223.87mW
	LTE Band 4 Channel Bandwidth: 20MHz	226.99mW
	LTE Band 12 Channel Bandwidth: 1.4MHz	107.89mW
	LTE Band 12 Channel Bandwidth: 3MHz	106.17mW
	LTE Band 12 Channel Bandwidth: 5MHz	106.17mW
	LTE Band 12 Channel Bandwidth: 10MHz	106.66mW
	LTE Band 30 Channel Bandwidth: 5MHz	234.42mW
	LTE Band 30 Channel Bandwidth: 10MHz	235.5mW
ANTENNA TYPE	PIFA Antenna with -0.8dBi gain for LTE B4 PIFA Antenna with -1.8dBi gain for LTE B12 PIFA Antenna with -1.1dBi gain for LTE B30	
HW VERSION	1.0	
SW VERSION	SL100EAC010001	
I/O PORTS	Refer to user's manual	
CABLE SUPPLIED	USB cable: unshielded without ferrite, 1.0meter	
EXTREME TEMPERATURE	-10-55 ℃	
EXTREME VOLTAGE	3.6V - 4.4V	

NOTE:

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

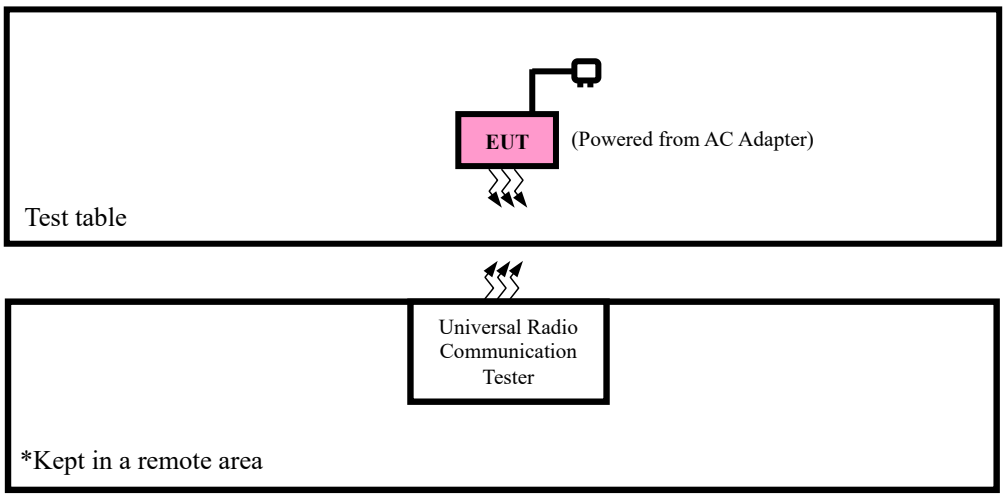
2. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.

List of Accessory:

ACCESSORIES	BRAND	MANUFACTURER	MODEL	SPECIFICATION
Battery	COOSEA	ZHONGSHAN TIANMAO BATTERY CO., LTD	BL-A32CT	Capacity：3.85 Vdc, 3450mAh
AC Adapter	COOSEA	Guangdong Beicom Electronics Co., Ltd.	U312E0A050200	I/P:100-240V,50/60Hz,0.35A, O/P: 5.0V,2.0A 10.0W
USB Cable	COOSEA	Wivtak	TP-C0028-B3	Signal Line, 1.0meter

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:

DESCRIPTION
EUT + Adapter + USB Cable with LTE link

LTE BAND 4 MODE

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
EIRP	19957 to 20393	19957, 20175, 20393	1.4MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
	19965 to 20385	19965, 20175, 20385	3MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
	19975 to 20375	19975, 20175, 20375	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
	20000 to 20350	20000, 20175, 20350	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
	20025 to 20325	20025, 20175, 20325	15MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
	20050 to 20300	20050, 20175, 20300	20MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
FREQUENCY STABILITY	19957 to 20393	19957, 20393	1.4MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
	19965 to 20385	19965, 20385	3MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
	19975 to 20375	19975, 20375	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
	20000 to 20350	20000, 20350	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
	20025 to 20325	20025, 20325	15MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
	20050 to 20300	20050, 20300	20MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
OCCUPIED BANDWIDTH	19957 to 20393	19957, 20175, 20393	1.4MHz	QPSK, 16QAM, 64QAM	6 RB / 0 RB Offset
	19965 to 20385	19965, 20175, 20385	3MHz	QPSK, 16QAM, 64QAM	15 RB / 0 RB Offset
	19975 to 20375	19975, 20175, 20375	5MHz	QPSK, 16QAM, 64QAM	25 RB / 0 RB Offset
	20000 to 20350	20000, 20175, 20350	10MHz	QPSK, 16QAM, 64QAM	50 RB / 0 RB Offset
	20025 to 20325	20025, 20175, 20325	15MHz	QPSK, 16QAM, 64QAM	75 RB / 0 RB Offset
	20050 to 20300	20050, 20175, 20300	20MHz	QPSK, 16QAM, 64QAM	100 RB / 0 RB Offset
PEAK TO AVERAGE RATIO	19957 to 20393	19957, 20175, 20393	1.4MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
	19965 to 20385	19965, 20175, 20385	3MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
	19975 to 20375	19975, 20175, 20375	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
	20000 to 20350	20000, 20175, 20350	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
	20025 to 20325	20025, 20175, 20325	15MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
	20050 to 20300	20050, 20175, 20300	20MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
BAND EDGE	19957 to 20393	19957	1.4MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
					6 RB / 0 RB Offset
		20393	1.4MHz	QPSK, 16QAM, 64QAM	1 RB / 5 RB Offset
					6 RB / 0 RB Offset
	19965 to 20385	19965	3MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
					15 RB / 0 RB Offset
		20385	3MHz	QPSK, 16QAM, 64QAM	1 RB / 14 RB Offset
					15 RB / 0 RB Offset
	19975 to 20375	19975	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
					25 RB / 0 RB Offset
		20375	5MHz	QPSK, 16QAM, 64QAM	1 RB / 24 RB Offset
					25 RB / 0 RB Offset
	20000 to 20350	20000	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
					50 RB / 0 RB Offset
		20350	10MHz	QPSK, 16QAM, 64QAM	1 RB / 49 RB Offset
					50 RB / 0 RB Offset

BAND EDGE	20025 to 20325	20025	15MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
					75 RB / 0 RB Offset
		20325	15MHz	QPSK, 16QAM, 64QAM	1 RB / 74 RB Offset
					75 RB / 0 RB Offset
	20050 to 20300	20050	20MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
					100 RB / 0 RB Offset
		20300	20MHz	QPSK, 16QAM, 64QAM	1 RB / 99 RB Offset
					100 RB / 0 RB Offset
CONDCUDETED EMISSION	19957 to 20393	19957, 20175, 20393	1.4MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
	19965 to 20385	19965, 20175, 20385	3MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
	19975 to 20375	19975, 20175, 20375	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
	20000 to 20350	20000, 20175, 20350	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
	20025 to 20325	20025, 20175, 20325	15MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
	20050 to 20300	20050, 20175, 20300	20MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
RADIATED EMISSION	19957 to 20393	19957, 20175, 20393	1.4MHz	QPSK	1 RB / 0 RB Offset
	19965 to 20385	20175	3MHz	QPSK	1 RB / 0 RB Offset
	19975 to 20375	20175	5MHz	QPSK	1 RB / 0 RB Offset
	20000 to 20350	20175	10MHz	QPSK	1 RB / 0 RB Offset
	20025 to 20325	20175	15MHz	QPSK	1 RB / 0 RB Offset
	20050 to 20300	20175	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 12

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
ERP	23017 to 23173	23017, 23095 , 23173	1.4MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
	23025 to 23165	23025, 23095 ,23165	3MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
	23035 to 23155	23035, 23095 ,23155	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
	23060 to 23130	23060, 23095 ,23130	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
FREQUENCY STABILITY	23017 to 23173	23017, 23173	1.4MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
	23025 to 23165	23025, 23165	3MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
	23035 to 23155	23035, 23155	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
	23060 to 23130	23060, 23130	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
OCCUPIED BANDWIDTH	23017 to 23173	23017, 23095 , 23173	1.4MHz	QPSK, 16QAM, 64QAM	6 RB / 0 RB Offset
	23025 to 23165	23025, 23095 ,23165	3MHz	QPSK, 16QAM, 64QAM	15 RB / 0 RB Offset
	23035 to 23155	23035, 23095 ,23155	5MHz	QPSK, 16QAM, 64QAM	25 RB / 0 RB Offset
	23060 to 23130	23060, 23095 ,23130	10MHz	QPSK, 16QAM, 64QAM	50 RB / 0 RB Offset
PEAK TO AVERAGE RATIO	23017 to 23173	23017, 23095 , 23173	1.4MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
	23025 to 23165	23025, 23095 ,23165	3MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
	23035 to 23155	23035, 23095 ,23155	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
	23060 to 23130	23060, 23095 ,23130	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
BAND EDGE	23017 to 23173	23017	1.4MHz	QPSK	1 RB / 0 RB Offset
					6 RB / 0 RB Offset
		23173	1.4MHz	QPSK	1 RB / 5 RB Offset
					6 RB / 0 RB Offset
	23025 to 23165	23025	3MHz	QPSK	1 RB / 0 RB Offset
					15 RB / 0 RB Offset
		23165	3MHz	QPSK	1 RB / 14 RB Offset
					15 RB / 0 RB Offset
	23035 to 23155	23035	5MHz	QPSK	1 RB / 0 RB Offset
					25 RB / 0 RB Offset
		23155	5MHz	QPSK	1 RB / 24 RB Offset
					25 RB / 0 RB Offset
	23060 to 23130	23060	10MHz	QPSK	1 RB / 0 RB Offset
					50 RB / 0 RB Offset
		23130	10MHz	QPSK	1 RB / 49 RB Offset
					50 RB / 0 RB Offset
CONDCUDETED EMISSION	23017 to 23173	23017, 23095 , 23173	1.4MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
	23025 to 23165	23025, 23095 ,23165	3MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
	23035 to 23155	23035, 23095 ,23155	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
	23060 to 23130	23060, 23095 ,23130	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
RADIATED EMISSION	23017 to 23173	23095	1.4MHz	QPSK	1 RB / 0 RB Offset
	23025 to 23165	23095	3MHz	QPSK	1 RB / 0 RB Offset
	23035 to 23155	23095	5MHz	QPSK	1 RB / 0 RB Offset
	23060 to 23130	23060, 23095 ,23130	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 30

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
ERP	27685 to 27735	27685, 27710, 27735	5MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset
	27710	27710	10MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset
FREQUENCY STABILITY	27685 to 27735	27685, 27735	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
	27710	27710	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
OCCUPIED BANDWIDTH	27685 to 27735	27685, 27710, 27735	5MHz	QPSK,16QAM, 64QAM	25 RB / 0 RB Offset
	27710	27710	10MHz	QPSK,16QAM, 64QAM	50 RB / 0 RB Offset
BAND EDGE	27685 to 27735	27685	5MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset
					25 RB / 0 RB Offset
		27735	5MHz	QPSK,16QAM, 64QAM	1 RB / 24 RB Offset
					25 RB / 0 RB Offset
	27710	27710	10MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset
					50 RB / 0 RB Offset
		/	10MHz	QPSK,16QAM, 64QAM	1 RB / 49 RB Offset
					50 RB / 0 RB Offset
CONDCUDETED EMISSION	27685 to 27735	27685, 27710, 27735	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
	27710	27710	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
RADIATED EMISSION	27685 to 27735	27685, 27710, 27735	5MHz	QPSK	1 RB / 0 RB Offset
	27710	27710	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.

TEST CONDITION:

TEST ITEM	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
ERP/EIRP	23deg. C, 70%RH	DC 5V By Adapter	Star Le
FREQUENCY STABILITY	23deg. C, 70%RH	3.5/3.85/4.4V By Battery	Chase Zhou
OCCUPIED BANDWIDTH	23deg. C, 70%RH	DC5V By Adapter	Chase Zhou
BAND EDGE	23deg. C, 70%RH	DC 5V By Adapter	Chase Zhou
CONDCUDETED EMISSION	23deg. C, 70%RH	DC5V By Adapter	Chase Zhou
RADIATED EMISSION	23deg. C, 70%RH	DC5V By Adapter	Star Le

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(Band4)

According to the specific rule Part 27.50(c)(10) Fixed, mobile, and Portable stations (hand-held devices) transmitting in the 698-746 MHz bands are limited to 3 watts ERP.(Band12)

For mobile and portable stations transmitting in the 2305-2315 MHz band or the 2350-2360 MHz band, the average EIRP must not exceed 50 milliwatts within any 1 megahertz of authorized bandwidth, *except that* for mobile and portable stations compliant with 3GPP LTE standards or another advanced mobile broadband protocol that avoids concentrating energy at the edge of the operating band the average EIRP must not exceed 250 milliwatts within any 5 megahertz of authorized bandwidth but may exceed 50 milliwatts within any 1 megahertz of authorized bandwidth.(Band30)

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

ERP or EIRP = $P_{Meas} + G_T – L_C$

Where:

ERP or EIRP = effective radiated power or equivalent isotropically radiated power, respectively

(expressed in the same units as P_{Meas}, typically dBW or dBm);

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

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

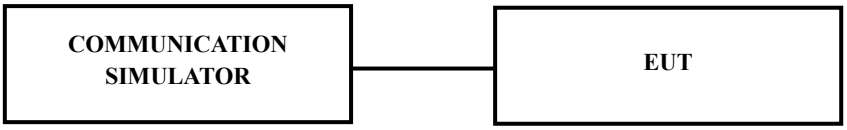
L_C = signal attenuation in the connecting cable between the transmitter and antenna, in dB.

CONDUCTED POWER MEASUREMENT:

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

3.1.3 TEST SETUP

CONDUCTED POWER MEASUREMENT:



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

3.1.4 TEST RESULTS

AVERAGE CONDUCTED OUTPUT POWER (dBm)

LTE Band 4

Band/BW	Modulation	RB Size	RB Offset	Low CH 19957	Mid CH 20175	High CH 20393	MPR
				Frequency 1710.7 MHz	Frequency 1732.5 MHz	Frequency 1754.3 MHz	
4/ 1.4	QPSK	1	0	23.84	23.91	23.95	0
		1	2	24.20	24.24	24.34	0
		1	5	23.86	23.88	23.96	0
		3	0	24.20	24.25	24.44	0
		3	1	24.28	24.32	24.32	0
		3	3	24.05	24.09	24.25	0
		6	0	23.25	23.23	23.37	1
	16QAM	1	0	23.07	23.13	23.19	1
		1	2	23.44	23.43	23.61	1
		1	5	23.02	23.09	23.24	1
		3	0	23.25	23.24	23.40	1
		3	1	23.12	23.29	23.33	1
		3	3	23.10	23.12	23.29	1
		6	0	22.18	22.24	22.27	2
	64QAM	1	0	21.96	22.07	22.18	2
		1	2	22.34	22.41	22.49	2
		1	5	21.99	21.97	22.18	2
		3	0	22.23	21.30	21.31	2
		3	1	22.15	21.24	21.31	2
		3	3	22.13	21.17	21.30	2
		6	0	21.21	21.20	21.36	3

Band/BW	Modulation	RB Size	RB Offset	Low CH 19965	Mid CH 20175	High CH 20385	MPR
				Frequency 1711.5 MHz	Frequency 1732.5 MHz	Frequency 1753.5 MHz	
4/ 3	QPSK	1	0	23.86	23.93	23.94	0
		1	7	24.16	24.25	24.34	0
		1	14	23.82	23.88	23.96	0
		8	0	23.19	23.28	23.44	1
		8	3	23.21	23.32	23.34	1
		8	7	23.02	23.16	23.29	1
		15	0	23.22	23.24	23.31	1
	16QAM	1	0	23.04	23.19	23.22	1
		1	7	23.41	23.46	23.59	1
		1	14	23.05	23.09	23.24	1
		8	0	22.21	22.25	22.40	2
		8	3	22.17	22.24	22.36	2
		8	7	22.12	22.10	22.25	2
		15	0	22.18	22.18	22.30	2
	64QAM	1	0	22.02	22.10	22.12	2
		1	7	22.37	22.35	22.48	2
		1	14	22.00	21.99	22.18	2
		8	0	21.26	21.34	21.32	3
		8	3	21.19	21.18	21.36	3
		8	7	21.10	21.21	21.26	3
		15	0	21.23	21.17	21.40	3

Band/BW	Modulation	RB Size	RB Offset	Low CH 19975	Mid CH 20175	High CH 20375	MPR
				Frequency 1712.5 MHz	Frequency 1732.5 MHz	Frequency 1752.5 MHz	
4/ 5	QPSK	1	0	23.87	23.88	23.95	0
		1	12	24.21	24.22	24.34	0
		1	24	23.83	23.87	24.00	0
		12	0	23.22	23.28	23.41	1
		12	6	23.21	23.33	23.35	1
		12	13	23.06	23.12	23.30	1
		25	0	23.20	23.27	23.34	1
	16QAM	1	0	23.05	23.15	23.22	1
		1	12	23.38	23.49	23.58	1
		1	24	23.05	23.09	23.23	1
		12	0	22.21	22.23	22.37	2
		12	6	22.14	22.28	22.32	2
		12	13	22.07	22.12	22.28	2
		25	0	22.18	22.19	22.27	2
	64QAM	1	0	21.96	22.07	22.18	2
		1	12	22.34	22.41	22.48	2
		1	24	21.93	22.04	22.18	2
		12	0	21.27	21.31	21.31	3
		12	6	21.13	21.25	21.35	3
		12	13	21.14	21.20	21.23	3
		25	0	21.19	21.23	21.38	3

Band/BW	Modulation	RB Size	RB Offset	Low CH 20000	Mid CH 20175	High CH 20350	MPR
				Frequency 1715 MHz	Frequency 1732.5 MHz	Frequency 1750 MHz	
4/ 10	QPSK	1	0	23.84	23.91	23.95	0
		1	24	24.21	24.22	24.35	0
		1	49	23.80	23.91	23.96	0
		25	0	23.23	23.27	23.44	1
		25	12	23.27	23.27	23.35	1
		25	25	23.04	23.09	23.29	1
		50	0	23.25	23.27	23.31	1
	16QAM	1	0	23.05	23.12	23.18	1
		1	24	23.43	23.45	23.61	1
		1	49	23.05	23.10	23.20	1
		25	0	22.23	22.21	22.43	2
		25	12	22.18	22.22	22.37	2
		25	25	22.06	22.13	22.25	2
		50	0	22.22	22.18	22.31	2
	64QAM	1	0	21.95	22.08	22.15	2
		1	24	22.39	22.37	22.52	2
		1	49	21.99	21.98	22.15	2
		25	0	21.25	21.28	21.37	3
		25	12	21.20	21.24	21.29	3
		25	25	21.13	21.17	21.25	3
		50	0	21.24	21.19	21.39	3

Band/BW	Modulation	RB Size	RB Offset	Low CH 20025	Mid CH 20175	High CH 20325	MPR
				Frequency 1717.5 MHz	Frequency 1732.5 MHz	Frequency 1747.5 MHz	
4/ 15	QPSK	1	0	23.91	23.91	23.92	0
		1	37	24.19	24.27	24.30	0
		1	74	23.86	23.94	23.97	0
		36	0	23.20	23.28	23.45	1
		36	19	23.28	23.32	23.35	1
		36	39	23.02	23.10	23.29	1
		75	0	23.25	23.25	23.36	1
	16QAM	1	0	23.09	23.19	23.18	1
		1	37	23.42	23.46	23.61	1
		1	74	23.01	23.15	23.22	1
		36	0	22.27	22.21	22.44	2
		36	19	22.12	22.26	22.33	2
		36	39	22.11	22.11	22.28	2
		75	0	22.23	22.21	22.24	2
	64QAM	1	0	21.97	22.09	22.16	2
		1	37	22.40	22.36	22.49	2
		1	74	21.95	21.97	22.18	2
		36	0	21.30	21.34	21.31	3
		36	19	21.14	21.18	21.31	3
		36	39	21.16	21.24	21.27	3
		75	0	21.23	21.17	21.40	3

Band/BW	Modulation	RB Size	RB Offset	Low CH 20050	Mid CH 20175	High CH 20300	MPR
				Frequency 1720 MHz	Frequency 1732.5 MHz	Frequency 1745 MHz	
4/ 20	QPSK	1	0	23.92	23.95	24.00	0
		1	50	24.23	24.30	24.36	0
		1	99	23.88	23.95	24.01	0
		50	0	23.26	23.33	23.46	1
		50	25	23.29	23.34	23.40	1
		50	50	23.10	23.17	23.31	1
		100	0	23.26	23.29	23.39	1
	16QAM	1	0	23.12	23.20	23.24	1
		1	50	23.46	23.51	23.63	1
		1	99	23.07	23.17	23.25	1
		50	0	22.29	22.29	22.45	2
		50	25	22.20	22.30	22.38	2
		50	50	22.14	22.17	22.30	2
		100	0	22.24	22.26	22.32	2
	64QAM	1	0	22.03	22.12	22.20	2
		1	50	22.42	22.43	22.54	2
		1	99	22.01	22.05	22.20	2
		50	0	21.31	21.36	21.39	3
		50	25	21.21	21.26	21.37	3
		50	50	21.18	21.25	21.31	3
		100	0	21.25	21.25	21.41	3

LTE Band 12

Band/BW	Modulation	RB Size	RB Offset	Low CH 23017 Frequency 699.7 MHz	Mid CH 23095 Frequency 707.5 MHz	High CH 23173 Frequency 715.3 MHz	MPR
12/ 1.4	QPSK	1	0	23.43	23.70	23.97	0
		1	2	23.69	23.85	24.21	0
		1	5	23.65	23.82	24.17	0
		3	0	23.66	23.88	24.20	0
		3	1	23.70	24.01	24.17	0
		3	3	23.75	23.96	24.28	0
		6	0	22.74	22.98	23.25	1
	16QAM	1	0	22.79	23.04	23.35	1
		1	2	22.87	23.12	23.41	1
		1	5	22.82	22.98	23.37	1
		3	0	22.65	22.91	23.15	1
		3	1	22.65	23.01	23.19	1
		3	3	22.67	22.93	23.26	1
		6	0	21.68	21.96	22.21	2
	64QAM	1	0	21.61	21.90	22.22	2
		1	2	21.75	22.12	22.31	2
		1	5	21.77	22.03	22.34	2
		3	0	21.67	21.93	22.14	2
		3	1	21.63	21.99	22.20	2
		3	3	21.75	21.96	22.26	2
		6	0	20.72	21.00	21.25	3

Band/BW	Modulation	RB Size	RB Offset	Low CH 23025 Frequency 700.5 MHz	Mid CH 23095 Frequency 707.5 MHz	High CH 23165 Frequency 714.5 MHz	MPR
12/ 3	QPSK	1	0	23.45	23.72	23.96	0
		1	7	23.65	23.86	24.21	0
		1	14	23.61	23.82	24.17	0
		8	0	22.65	22.91	23.20	1
		8	3	22.63	23.01	23.19	1
		8	7	22.72	23.03	23.32	1
		15	0	22.71	22.99	23.19	1
	16QAM	1	0	22.76	23.10	23.38	1
		1	7	22.84	23.15	23.39	1
		1	14	22.85	22.98	23.37	1
		8	0	21.61	21.92	22.15	2
		8	3	21.70	21.96	22.22	2
		8	7	21.69	21.91	22.22	2
		15	0	21.68	21.90	22.24	2
	64QAM	1	0	21.67	21.93	22.16	2
		1	7	21.78	22.06	22.30	2
		1	14	21.78	22.05	22.34	2
		8	0	20.70	20.97	21.15	3
		8	3	20.67	20.93	21.25	3
		8	7	20.72	21.00	21.22	3
		15	0	20.74	20.97	21.29	3

Band/BW	Modulation	RB Size	RB Offset	Low CH 23035 Frequency 701.5 MHz	Mid CH 23095 Frequency 707.5 MHz	High CH 23155 Frequency 713.5 MHz	MPR
12/ 5	QPSK	1	0	23.46	23.67	23.97	0
		1	12	23.70	23.83	24.21	0
		1	24	23.62	23.81	24.21	0
		12	0	22.68	22.91	23.17	1
		12	6	22.63	23.02	23.20	1
		12	13	22.76	22.99	23.33	1
		25	0	22.69	23.02	23.22	1
	16QAM	1	0	22.77	23.06	23.38	1
		1	12	22.81	23.18	23.38	1
		1	24	22.85	22.98	23.36	1
		12	0	21.61	21.90	22.12	2
		12	6	21.67	22.00	22.18	2
		12	13	21.64	21.93	22.25	2
		25	0	21.68	21.91	22.21	2
	64QAM	1	0	21.61	21.90	22.22	2
		1	12	21.75	22.12	22.30	2
		1	24	21.71	22.10	22.34	2
		12	0	20.71	20.94	21.14	3
		12	6	20.61	21.00	21.24	3
		12	13	20.76	20.99	21.19	3
		25	0	20.70	21.03	21.27	3

Band/BW	Modulation	RB Size	RB Offset	Low CH 23060 Frequency 704 MHz	Mid CH 23095 Frequency 707.5 MHz	High CH 23130 Frequency 711 MHz	MPR
12/ 10	QPSK	1	0	23.51	23.74	24.02	0
		1	24	23.72	23.91	24.23	0
		1	49	23.67	23.89	24.22	0
		25	0	22.72	22.96	23.22	1
		25	12	22.71	23.03	23.25	1
		25	25	22.80	23.04	23.34	1
		50	0	22.75	23.04	23.27	1
	16QAM	1	0	22.84	23.11	23.40	1
		1	24	22.89	23.20	23.43	1
		1	49	22.87	23.06	23.38	1
		25	0	21.69	21.96	22.20	2
		25	12	21.73	22.02	22.24	2
		25	25	21.71	21.98	22.27	2
		50	0	21.74	21.98	22.26	2
	64QAM	1	0	21.68	21.95	22.24	2
		1	24	21.83	22.14	22.36	2
		1	49	21.79	22.11	22.36	2
		25	0	20.75	20.99	21.22	3
		25	12	20.69	21.01	21.26	3
		25	25	20.80	21.04	21.27	3
		50	0	20.76	21.05	21.30	3

LTE Band 30

Band/BW	Modulation	RB Size	RB Offset	Low CH 27685 2307.5 MHz	Mid CH 27710 2310.0 MHz	High CH 27735 2312.5 MHz	MPR
30/ 5	QPSK	1	0	24.63	24.61	24.63	0
		1	12	24.80	24.74	24.80	0
		1	24	24.64	24.61	24.68	0
		12	0	23.88	23.87	23.87	1
		12	6	23.80	23.87	23.83	1
		12	13	23.78	23.77	23.81	1
		25	0	23.80	23.84	23.81	1
	16QAM	1	0	23.73	23.75	23.78	1
		1	12	23.88	23.94	23.91	1
		1	24	23.86	23.80	23.86	1
		12	0	22.78	22.80	22.78	2
		12	6	22.76	22.80	22.76	2
		12	13	22.72	22.74	22.77	2
		25	0	22.81	22.80	22.82	2
	64QAM	1	0	22.70	22.72	22.75	2
		1	12	22.86	22.92	22.88	2
		1	24	22.77	22.84	22.83	2
		12	0	21.76	21.75	21.72	3
		12	6	21.75	21.82	21.81	3
		12	13	21.68	21.67	21.64	3
		25	0	21.73	21.77	21.76	3

Band/BW	Modulation	RB Size	RB Offset		Mid CH 27710 2310.0 MHz		MPR
30/ 10	QPSK	1	0		24.68		0
		1	24		24.82		0
		1	49		24.69		0
		25	0		23.92		1
		25	12		23.88		1
		25	25		23.82		1
		50	0		23.86		1
	16QAM	1	0		23.80		1
		1	24		23.96		1
		1	49		23.88		1
		25	0		22.86		2
		25	12		22.82		2
		25	25		22.79		2
		50	0		22.87		2
	64QAM	1	0		22.77		2
		1	24		22.94		2
		1	49		22.85		2
		25	0		21.80		3
		25	12		21.83		3
		25	25		21.72		3
		50	0		21.79		3

EIRP
LTE BAND 4
CHANNEL BANDWIDTH: 1.4MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19957	1710.7	24.28	-0.8	23.48	222.84	1
20175	1732.5	24.32	-0.8	23.52	224.91	1
20393	1754.3	24.44	-0.8	23.64	**231.21**	1

CHANNEL BANDWIDTH: 1.4MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19957	1710.7	23.44	-0.8	22.64	183.65	1
20175	1732.5	23.43	-0.8	22.63	183.23	1
20393	1754.3	23.61	-0.8	22.81	190.99	1

CHANNEL BANDWIDTH: 1.4MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19957	1710.7	22.34	-0.8	21.54	142.56	1
20175	1732.5	22.41	-0.8	21.61	144.88	1
20393	1754.3	22.49	-0.8	21.69	147.57	1

CHANNEL BANDWIDTH: 3MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19965	1711.5	24.16	-0.8	23.36	216.77	1
20175	1732.5	24.25	-0.8	23.45	221.31	1
20385	1753.5	24.34	-0.8	23.54	**225.94**	1

CHANNEL BANDWIDTH: 3MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19965	1711.5	23.41	-0.8	22.61	182.39	1
20175	1732.5	23.46	-0.8	22.66	184.5	1
20385	1753.5	22.25	-0.8	21.45	139.64	1

CHANNEL BANDWIDTH: 3MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19965	1711.5	22.37	-0.8	21.57	143.55	1
20175	1732.5	22.35	-0.8	21.55	142.89	1
20385	1753.5	22.48	-0.8	21.68	147.23	1

CHANNEL BANDWIDTH: 5MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19975	1712.5	24.21	-0.8	23.41	219.28	1
20175	1732.5	24.22	-0.8	23.42	219.79	1
20375	1752.5	24.34	-0.8	23.54	**225.94**	1

CHANNEL BANDWIDTH: 5MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19975	1712.5	23.38	-0.8	22.58	181.13	1
20175	1732.5	23.49	-0.8	22.69	185.78	1
20375	1752.5	23.58	-0.8	22.78	189.67	1

CHANNEL BANDWIDTH: 5MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19975	1712.5	22.34	-0.8	21.54	142.56	1
20175	1732.5	22.41	-0.8	21.61	144.88	1
20375	1752.5	22.48	-0.8	21.68	147.23	1

CHANNEL BANDWIDTH: 10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20000	1715	24.21	-0.8	23.41	219.28	1
20175	1732.5	24.22	-0.8	23.42	219.79	1
20350	1750	24.35	-0.8	23.55	**226.46**	1

CHANNEL BANDWIDTH: 10MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20000	1715	23.43	-0.8	22.63	183.23	1
20175	1732.5	23.45	-0.8	22.65	184.08	1
20350	1750	23.61	-0.8	22.81	190.99	1

CHANNEL BANDWIDTH: 10MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20000	1715	22.39	-0.8	21.59	144.21	1
20175	1732.5	22.37	-0.8	21.57	143.55	1
20350	1750	22.52	-0.8	21.72	148.59	1

CHANNEL BANDWIDTH: 15MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20025	1717.5	24.19	-0.8	23.39	218.27	1
20175	1732.5	24.27	-0.8	23.47	222.33	1
20325	1747.5	24.3	-0.8	23.5	**223.87**	1

CHANNEL BANDWIDTH: 15MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20025	1717.5	23.42	-0.8	22.62	182.81	1
20175	1732.5	23.46	-0.8	22.66	184.5	1
20325	1747.5	23.61	-0.8	22.81	190.99	1

CHANNEL BANDWIDTH: 15MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20025	1717.5	22.4	-0.8	21.6	144.54	1
20175	1732.5	22.36	-0.8	21.56	143.22	1
20325	1747.5	22.49	-0.8	21.69	147.57	1

CHANNEL BANDWIDTH: 20MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20050	1720	24.23	-0.8	23.43	220.29	1
20175	1732.5	24.3	-0.8	23.5	223.87	1
20300	1745	24.36	-0.8	23.56	**226.99**	1

CHANNEL BANDWIDTH: 20MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20050	1720	23.46	-0.8	22.66	184.5	1
20175	1732.5	23.51	-0.8	22.71	186.64	1
20300	1745	23.63	-0.8	22.83	191.87	1

CHANNEL BANDWIDTH: 20MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20050	1720	22.42	-0.8	21.62	145.21	1
20175	1732.5	22.43	-0.8	21.63	145.55	1
20300	1745	22.54	-0.8	21.74	149.28	1

LTE BAND 12
CHANNEL BANDWIDTH: 1.4MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23017	699.7	23.75	-1.8	19.8	95.5	3
23095	707.5	24.01	-1.8	20.06	101.39	3
23173	715.3	24.28	-1.8	20.33	**107.89**	3

CHANNEL BANDWIDTH: 1.4MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23017	699.7	22.87	-1.8	18.92	77.98	3
23095	707.5	23.12	-1.8	19.17	82.6	3
23173	715.3	23.41	-1.8	19.46	88.31	3

CHANNEL BANDWIDTH: 1.4MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
23017	699.7	21.77	-1.8	17.82	60.53	3
23095	707.5	22.12	-1.8	18.17	65.61	3
23173	715.3	22.34	-1.8	18.39	69.02	3

CHANNEL BANDWIDTH: 3MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23025	700.5	23.65	-1.8	19.7	93.33	3
23095	707.5	23.86	-1.8	19.91	97.95	3
23165	714.5	24.21	-1.8	20.26	**106.17**	3

CHANNEL BANDWIDTH: 3MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23025	700.5	22.85	-1.8	18.9	77.62	3
23095	707.5	23.15	-1.8	19.2	83.18	3
23165	714.5	23.39	-1.8	19.44	87.9	3

CHANNEL BANDWIDTH: 3MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
23025	700.5	21.78	-1.8	17.83	60.67	3
23095	707.5	22.06	-1.8	18.11	64.71	3
23165	714.5	22.34	-1.8	18.39	69.02	3

CHANNEL BANDWIDTH: 5MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23035	701.5	23.7	-1.8	19.75	94.41	3
23095	707.5	23.83	-1.8	19.88	97.27	3
23155	713.5	24.21	-1.8	20.26	**106.17**	3

CHANNEL BANDWIDTH: 5MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23035	701.5	22.85	-1.8	18.9	77.62	3
23095	707.5	23.18	-1.8	19.23	83.75	3
23155	713.5	23.38	-1.8	19.43	87.7	3

CHANNEL BANDWIDTH: 5MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
23035	701.5	21.75	-1.8	17.8	60.26	3
23095	707.5	22.12	-1.8	18.17	65.61	3
23155	713.5	22.34	-1.8	18.39	69.02	3

CHANNEL BANDWIDTH: 10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23060	704	23.72	-1.8	19.77	94.84	3
23095	707.5	23.91	-1.8	19.96	99.08	3
23130	711	24.23	-1.8	20.28	**106.66**	3

CHANNEL BANDWIDTH: 10MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23060	704	22.89	-1.8	18.94	78.34	3
23095	707.5	23.2	-1.8	19.25	84.14	3
23130	711	23.43	-1.8	19.48	88.72	3

CHANNEL BANDWIDTH: 10MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
23060	704	21.83	-1.8	17.88	61.38	3
23095	707.5	22.14	-1.8	18.19	65.92	3
23130	711	22.36	-1.8	18.41	69.34	3

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

LTE BAND 30

CHANNEL BANDWIDTH: 5MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W/MHz)
27685	2307.5	24.8	-1.1	23.7	**234.42**	0.25/5MHz
27710	2310	24.74	-1.1	23.64	231.21	0.25/5MHz
27735	2312.5	24.8	-1.1	23.7	234.42	0.25/5MHz

CHANNEL BANDWIDTH: 5MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W/MHz)
27685	2307.5	23.88	-1.1	22.78	189.67	0.25/5MHz
27710	2310	23.94	-1.1	22.84	192.31	0.25/5MHz
27735	2312.5	23.91	-1.1	22.81	190.99	0.25/5MHz

CHANNEL BANDWIDTH: 5MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W/MHz)
27685	2307.5	22.86	-1.1	21.76	149.97	0.25/5MHz
27710	2310	22.92	-1.1	21.82	152.05	0.25/5MHz
27735	2312.5	22.88	-1.1	21.78	150.66	0.25/5MHz

CHANNEL BANDWIDTH: 10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W/MHz)
-	-	-	-	-	-	-
27710	2310	24.82	-1.1	23.72	**235.5**	0.25/5MHz
-	-	-	-	-	-	-

CHANNEL BANDWIDTH: 10MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W/MHz)
-	-	-	-	-	-	-
27710	2310	23.96	-1.1	22.86	193.2	0.25/5MHz
-	-	-	-	-	-	-

CHANNEL BANDWIDTH: 10MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W/MHz)
-	-	-	-	-	-	-
27710	2310	22.94	-1.1	21.84	152.76	0.25/5MHz
-	-	-	-	-	-	-

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

3.2 FREQUENCY STABILITY MEASUREMENT

3.2.1 LIMITS OF FREQUENCY STABILIITY MEASUREMENT

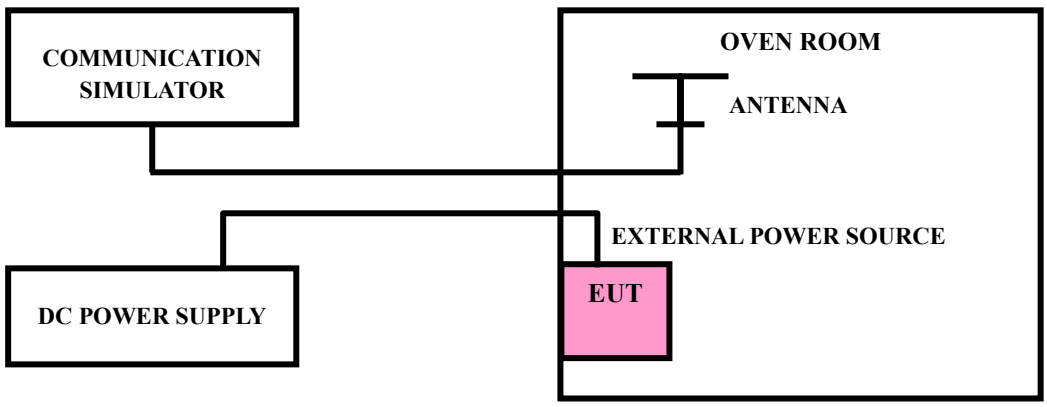
The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

3.2.2 TEST PROCEDURE

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

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

3.2.3 TEST SETUP



3.2.4 TEST RESULTS

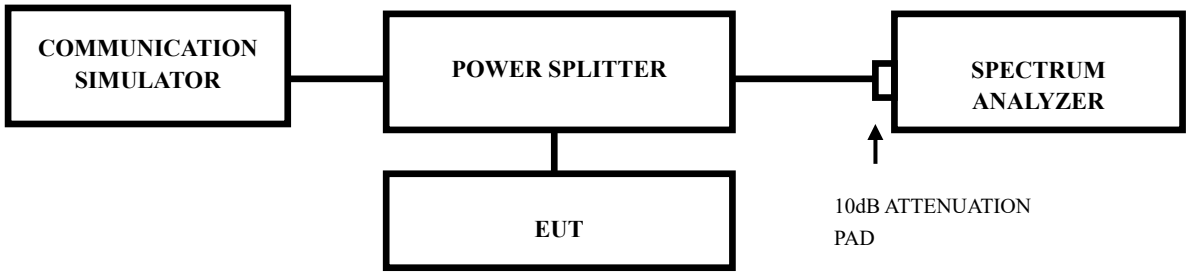
Please Refer to Appendix Of this test report.

3.3 OCCUPIED BANDWIDTH MEASUREMENT

3.3.1 LIMITS OF OCCUPIED BANDWIDTH MEASUREMENT

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

3.3.2 TEST SETUP



3.3.3 TEST PROCEDURES

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

3.3.4 TEST RESULTS

Please Refer to Appendix Of this test report.

3.4 BAND EDGE MEASUREMENT

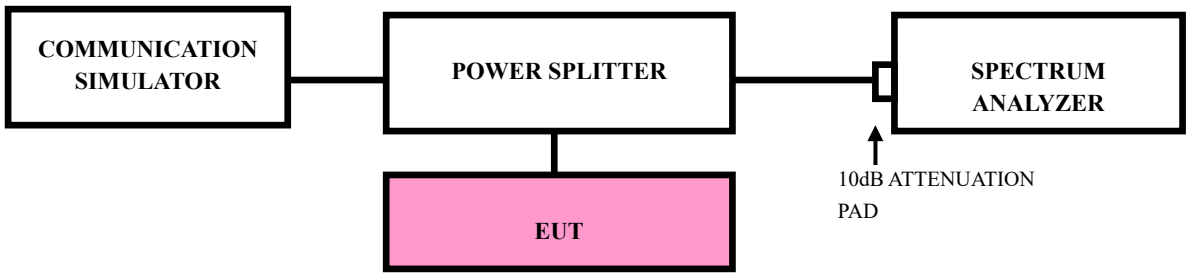
3.4.1 LIMITS OF BAND EDGE MEASUREMENT

According to FCC 27.53(g) specified that For operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least 43 + 10 log (P) dB. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.(Band12)

According to FCC 27.53(h) specified that For operations in the 1710-1755 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least 43 + 10 log (P) dB. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.(Band4)

According to FCC 27.53(a)(4) specified that For operations in the minimum permissible attenuation level for Band30 is>43 + 10 log (P) dB at 2300-2305MHz & 2345-2360MHz,> 55 + 10 log (P) dB at 2320-2324MHz & 2341-2345MHz,> 61 + 10 log (P) dB at 2324-2328MHz &2337-2341MHz.> 67 + 10 log (P) dB at 2288-2292MHz & 2328-2337MHz,and >70 + 10 log (P) dB at frequencies < 2288MHz & >2365MHz.(Band30)

3.4.2 TEST SETUP



3.4.3 TEST PROCEDURES

a. All measurements were done at low and high operational frequency range.

b. The center frequency of spectrum is the band edge frequency and span is 1~5 MHz.

c. RBW of the spectrum is 10kHz and VBW of the spectrum is 30kHz (GSM/GPRS/ EDGE/LTE bandwidth for (1.4M/3M/5M/10M/15M/20M)1RB/0RB&1RB/MAXRB).

d. The center frequency of spectrum is the band edge frequency and span is 10MHz. RBW of the spectrum is 100kHz and VBW of the spectrum is 300kHz (WCDMA).

e. The center frequency of spectrum is the band edge frequency and span is 1~5 MHz. RBW of the spectrum is ≥ 1%*EBW kHz and VBW of the spectrum is 3*RBW kHz. (LTE bandwidth 1.4M/3M/5M/10M/15M/20MHz).

f. Record the max trace plot into the test report.

3.4.4 TEST RESULTS

Please Refer to Appendix Of this test report.

3.5 CONDUCTED SPURIOUS EMISSIONS

3.5.1 LIMITS OF CONDUCTED SPURIOUS EMISSIONS MEASUREMENT

The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least 43 +10 log10(P) dB. The limit of emission is equal to -13dBm.(Band4&Band12)

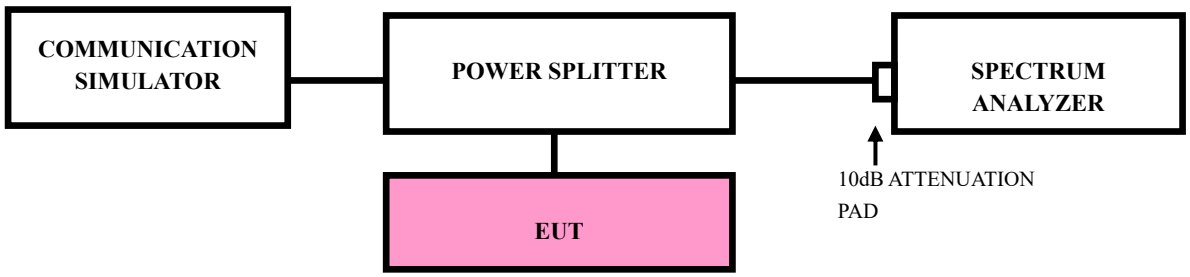
The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least 70 +10 log10(P) dB. The limit of emission is equal to -40dBm.(Band30)

3.5.2 TEST PROCEDURE

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

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

3.5.3 TEST SETUP



3.5.4 TEST RESULTS

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

Please Refer to Appendix Of this test report.

3.6 RADIATED EMISSION MEASUREMENT

3.6.1 LIMITS OF RADIATED EMISSION MEASUREMENT

The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least 43 +10 log10(P) dB. The limit of emission is equal to -13dBm.(Band4&Band12)

The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least 70 +10 log10(P) dB. The limit of emission is equal to -40dBm.(Band30)

3.6.2 TEST PROCEDURES

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

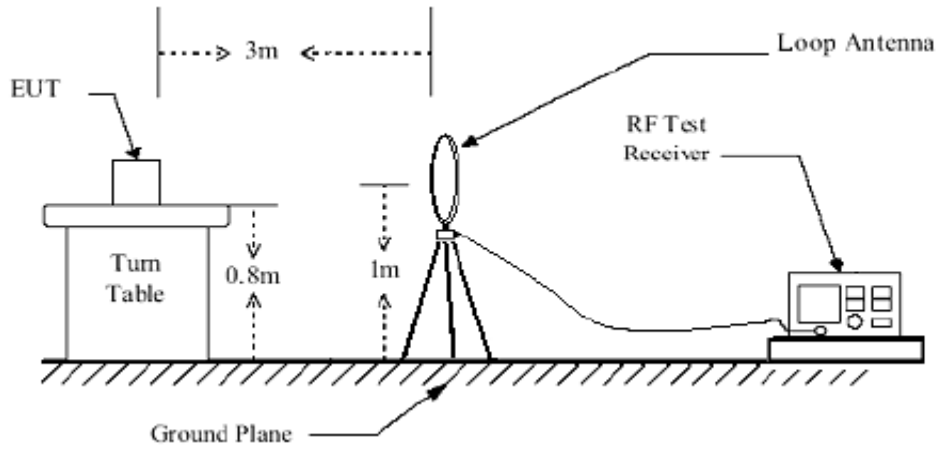
NOTE: The resolution bandwidth of spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz.

3.6.3 DEVIATION FROM TEST STANDARD

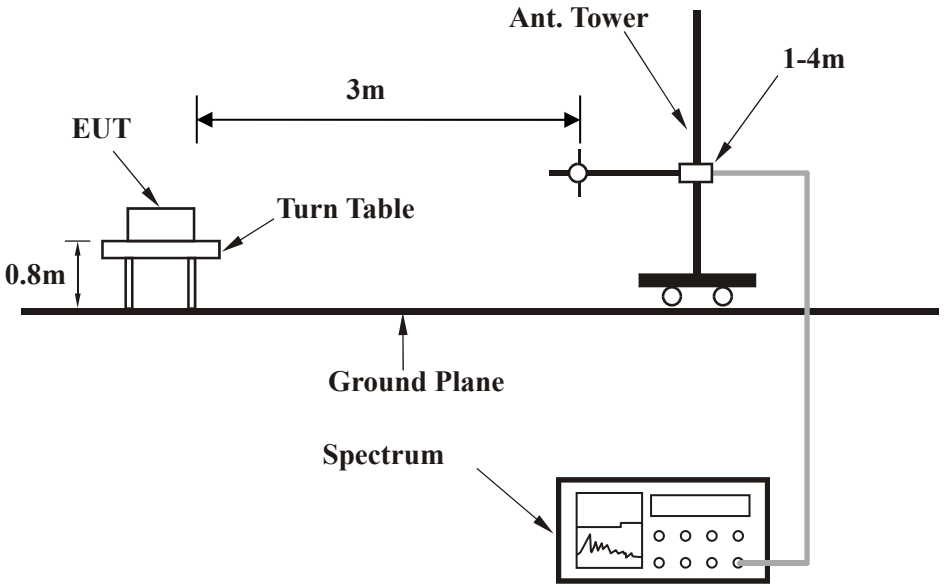
No deviation

3.6.4 TEST SETUP

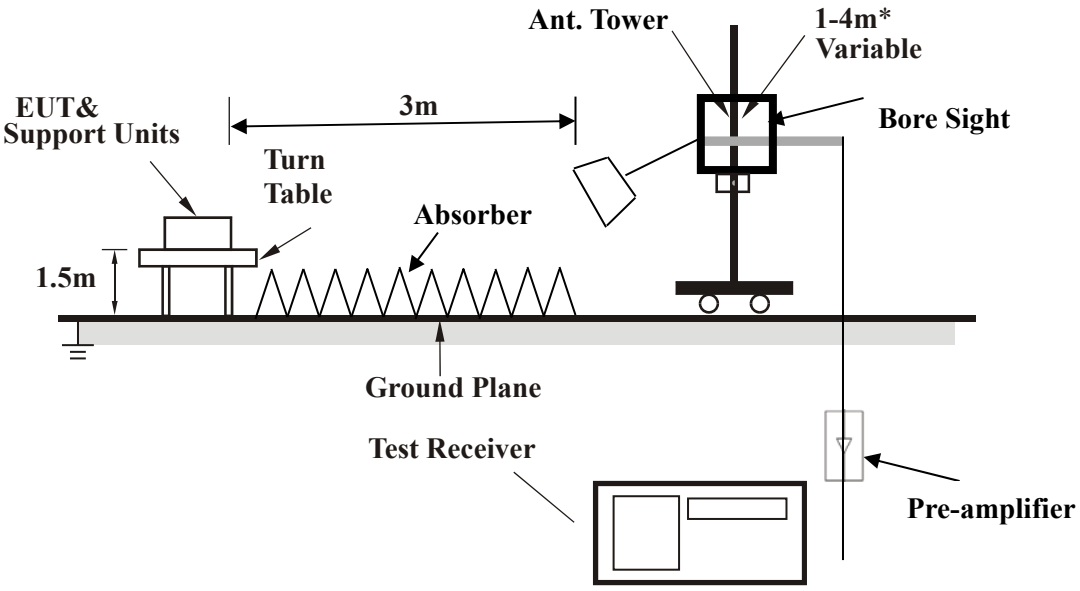
< Frequency Range below 30MHz >



< Frequency Range 30MHz~1GHz >



<Frequency Range above 1GHz>



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

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

3.6.5 TEST RESULTS

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

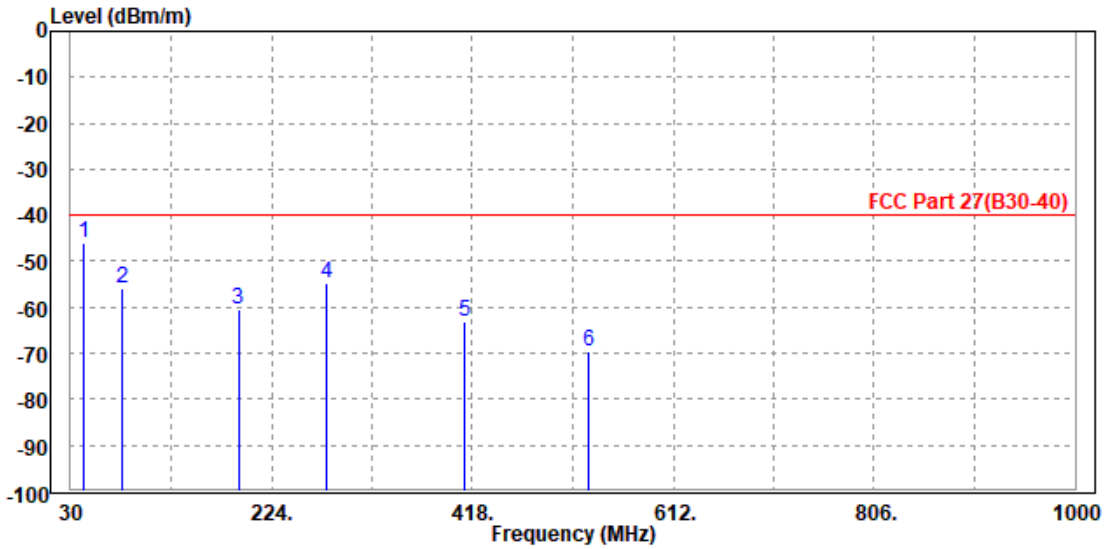
BELOW 1GHz WORST-CASE DATA

30 MHz – 1GHz data:

LTE Band 30
CHANNEL BANDWIDTH: 10MHz / QPSK

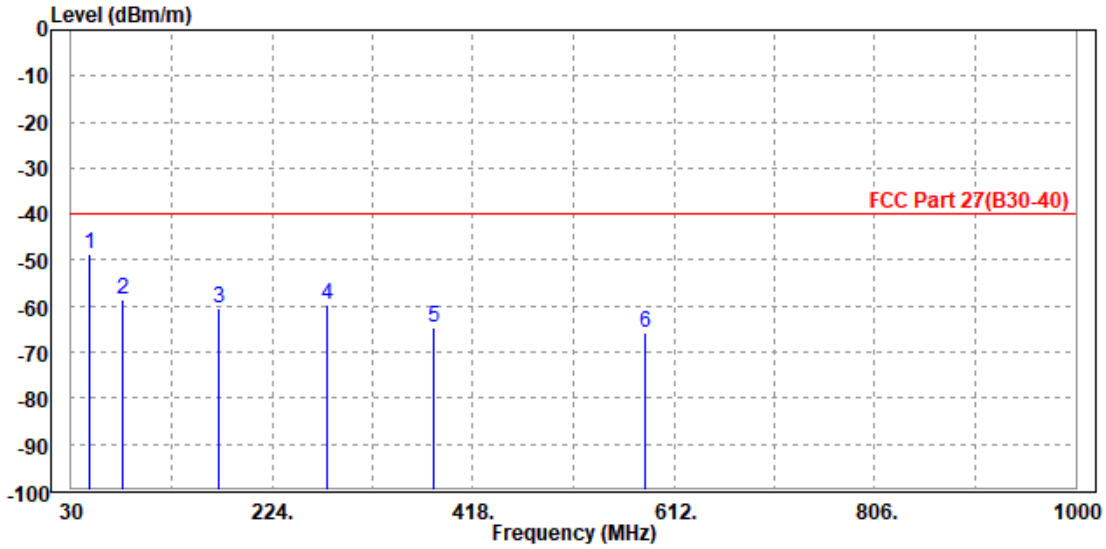
MODE	TX channel 27710	**FREQUENCY RANGE**	Below 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1 PP	42.610	-46.15	-55.93	-40.00	-6.15	9.78	Peak	Horizontal
2	79.470	-56.03	-48.14	-40.00	-16.03	-7.89	Peak	Horizontal
3	191.990	-60.41	-42.96	-40.00	-20.41	-17.45	Peak	Horizontal
4	277.350	-54.83	-39.90	-40.00	-14.83	-14.93	Peak	Horizontal
5	410.240	-62.94	-52.49	-40.00	-22.94	-10.45	Peak	Horizontal
6	529.550	-69.77	-59.89	-40.00	-29.77	-9.88	Peak	Horizontal



MODE	TX channel 27710	FREQUENCY RANGE	Below 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
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	47.460	-48.56	-44.62	-40.00	-8.56	-3.94	Peak	Vertical
2	80.440	-58.42	-48.16	-40.00	-18.42	-10.26	Peak	Vertical
3	172.590	-60.48	-46.53	-40.00	-20.48	-13.95	Peak	Vertical
4	277.350	-59.82	-48.42	-40.00	-19.82	-11.40	Peak	Vertical
5	380.170	-64.55	-53.54	-40.00	-24.55	-11.01	Peak	Vertical
6	583.870	-65.71	-58.39	-40.00	-25.71	-7.32	Peak	Vertical



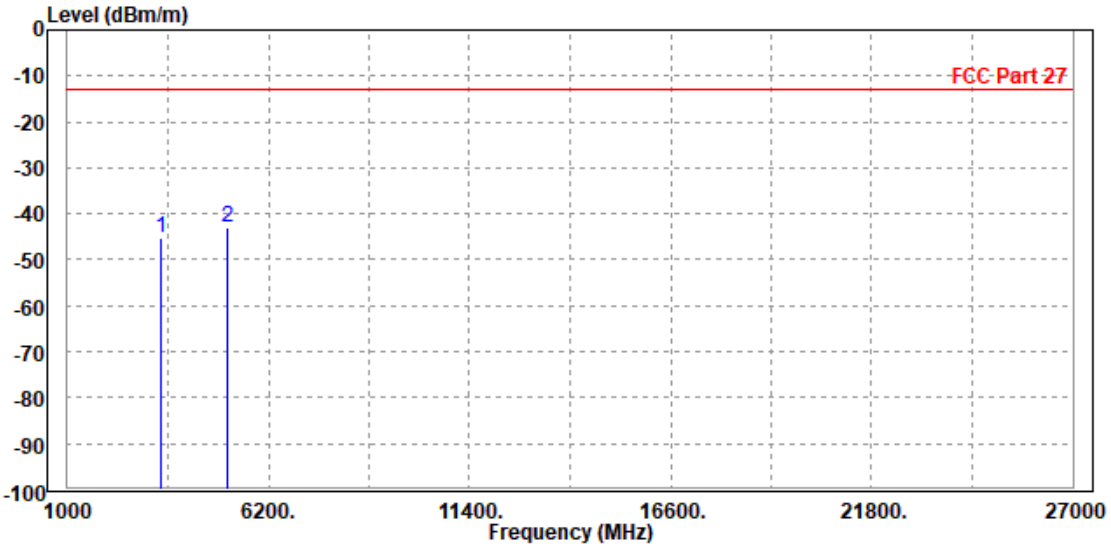
ABOVE 1GHz

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

LTE Band 4
CHANNEL BANDWIDTH: 1.4MHz / QPSK
CH 19957

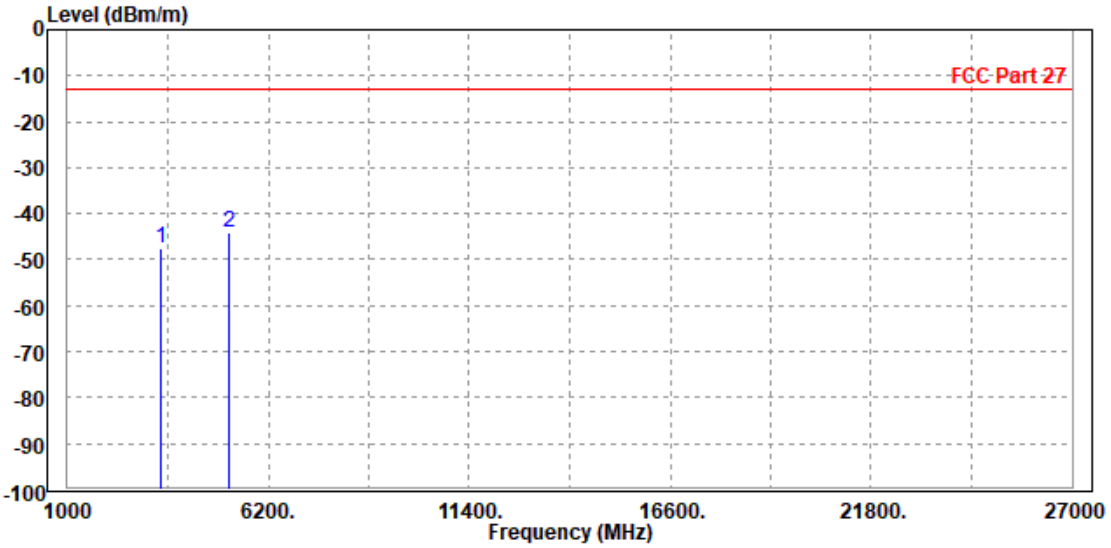
MODE	TX channel 19957	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60Hz
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3418.000	-45.24	-53.83	-13.00	-32.24	8.59	Peak	Horizontal
2 PP	5132.100	-43.14	-52.06	-13.00	-30.14	8.92	Peak	Horizontal



MODE	TX channel 19957	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			

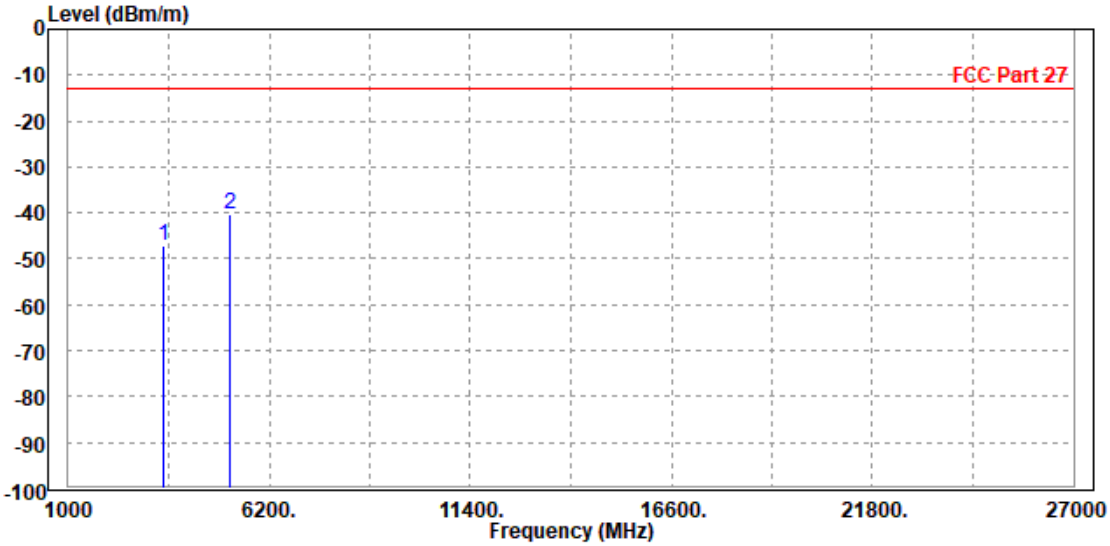
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3421.400	-47.58	-56.69	-13.00	-34.58	9.11	Peak	Vertical
2 PP	5186.000	-43.98	-53.81	-13.00	-30.98	9.83	Peak	Vertical



CH 20175

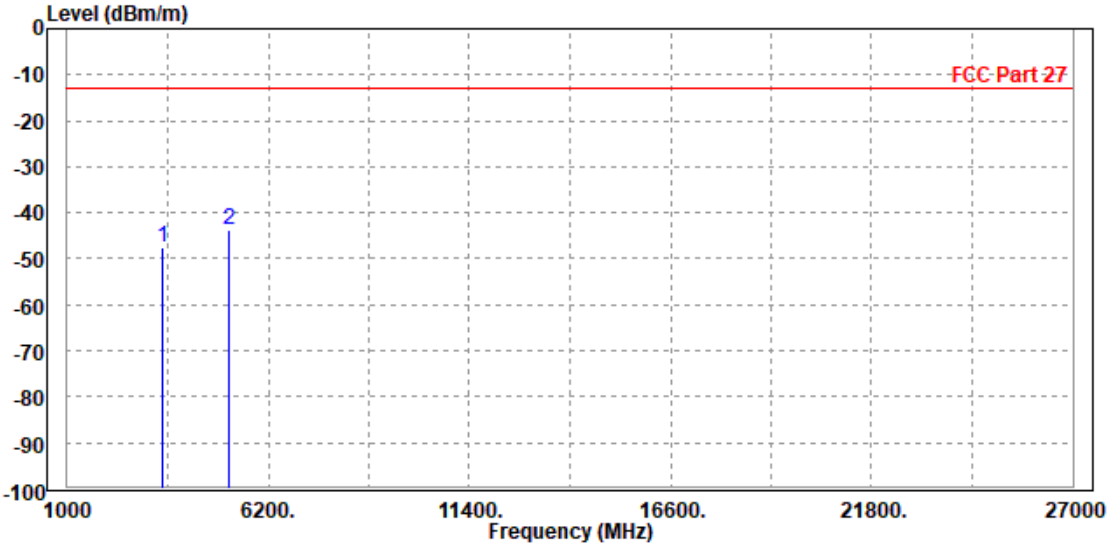
MODE	TX channel 20175	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60Hz
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3465.000	-47.30	-55.88	-13.00	-34.30	8.58	Peak	Horizontal
2 PP	5186.000	-40.23	-49.31	-13.00	-27.23	9.08	Peak	Horizontal



MODE	TX channel 20175	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			

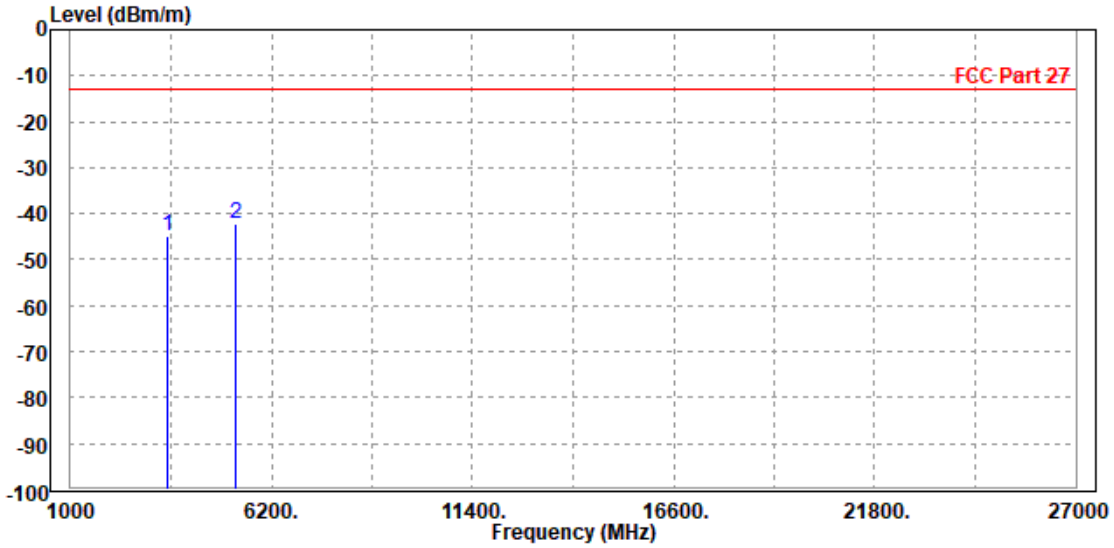
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3470.000	-47.55	-56.71	-13.00	-34.55	9.16	Peak	Vertical
2 PP	5197.500	-43.58	-53.40	-13.00	-30.58	9.82	Peak	Vertical



CH 20393

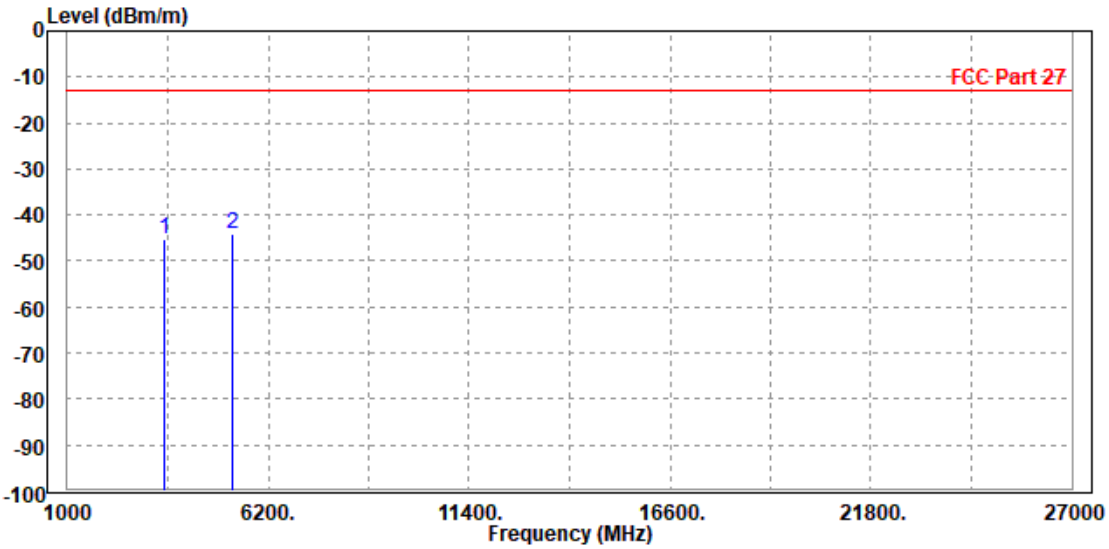
MODE	TX channel 20393	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60Hz
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3496.000	-44.95	-53.52	-13.00	-31.95	8.57	Peak	Horizontal
2 PP	5262.900	-42.09	-51.40	-13.00	-29.09	9.31	Peak	Horizontal



MODE	TX channel 20393	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			

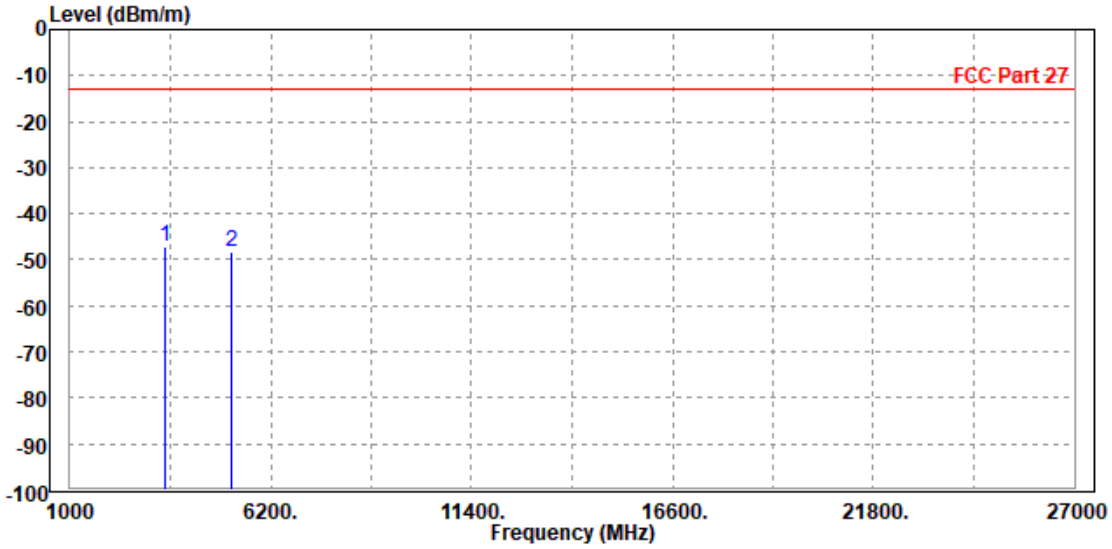
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3508.600	-45.37	-54.56	-13.00	-32.37	9.19	Peak	Vertical
2 PP	5264.000	-44.17	-53.97	-13.00	-31.17	9.80	Peak	Vertical



CHANNEL BANDWIDTH: 3MHz / QPSK

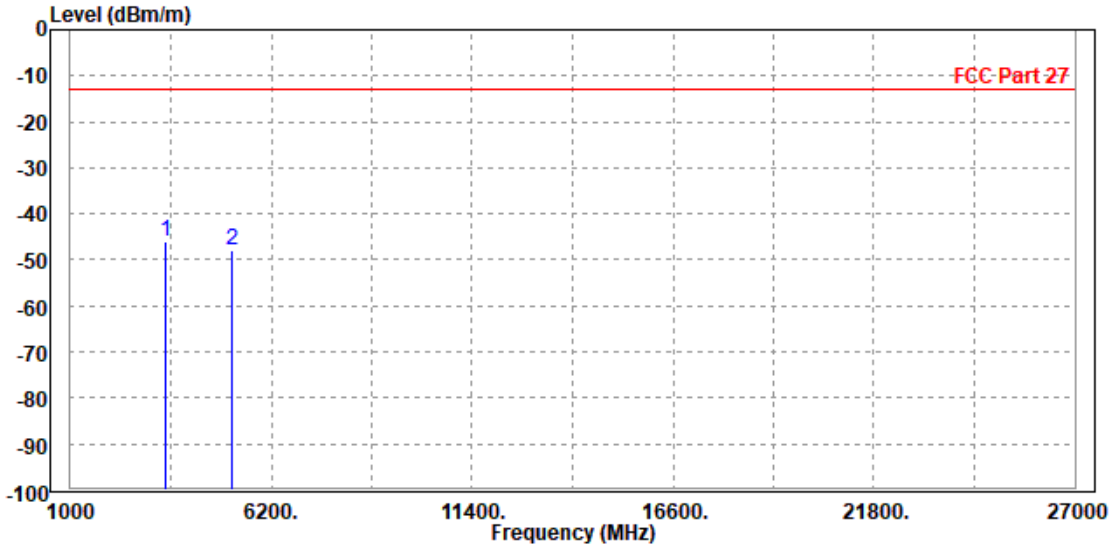
MODE	TX channel 20175	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60Hz
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1 PP	3470.000	-47.10	-55.68	-13.00	-34.10	8.58	Peak	Horizontal
2	5197.500	-48.10	-57.22	-13.00	-35.10	9.12	Peak	Horizontal



MODE	TX channel 20175	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60Hz
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

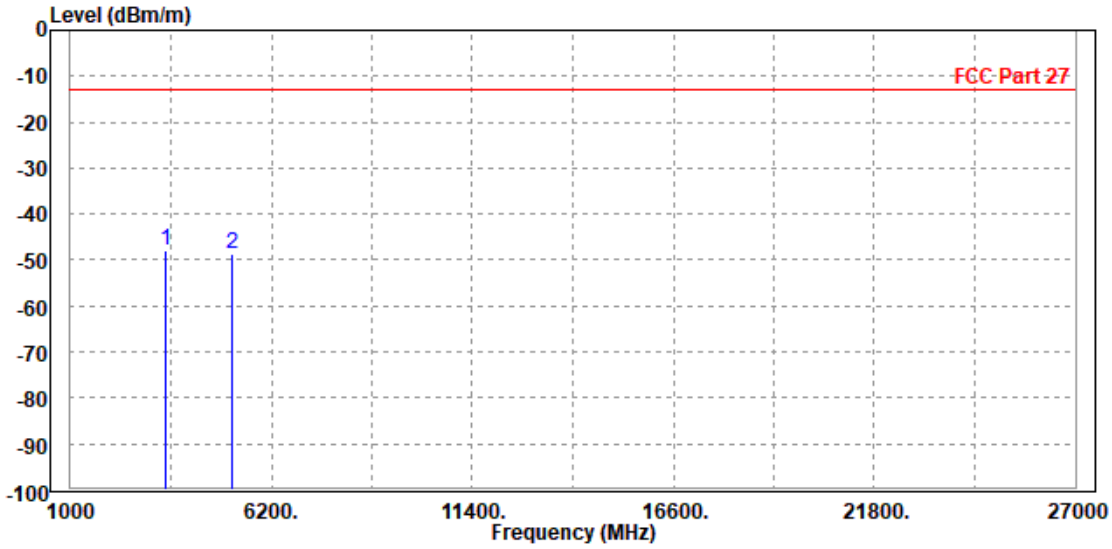
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP 3470.000	-45.97	-55.13	-13.00	-32.97	9.16	Peak	Vertical
2	5197.500	-48.07	-57.89	-13.00	-35.07	9.82	Peak	Vertical



CHANNEL BANDWIDTH: 5MHz / QPSK

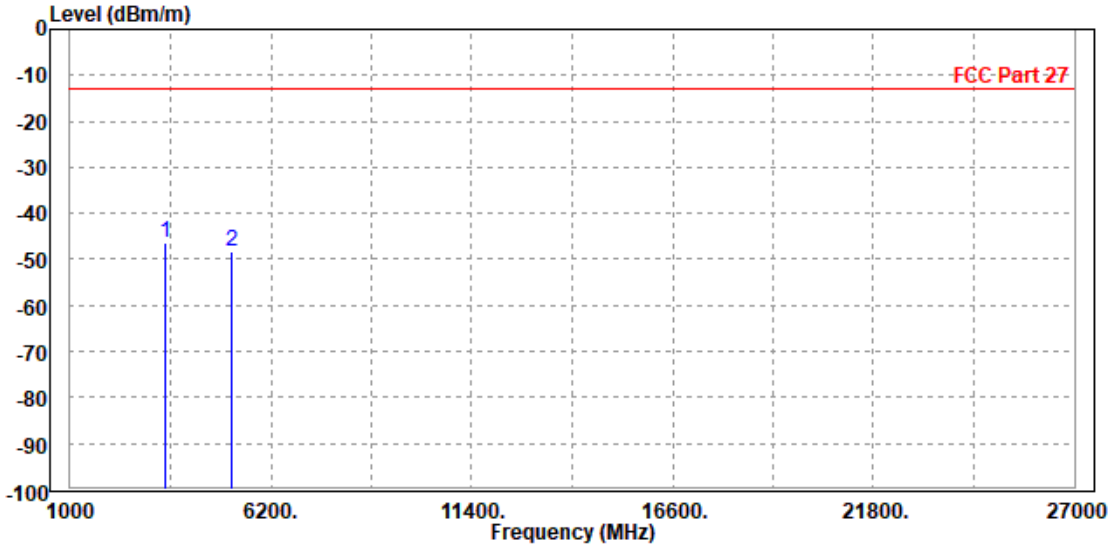
MODE	TX channel 20175	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60Hz
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP 3470.000	-48.00	-56.58	-13.00	-35.00	8.58	Peak	Horizontal
2	5197.500	-48.74	-57.86	-13.00	-35.74	9.12	Peak	Horizontal



MODE	TX channel 20175	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60Hz
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

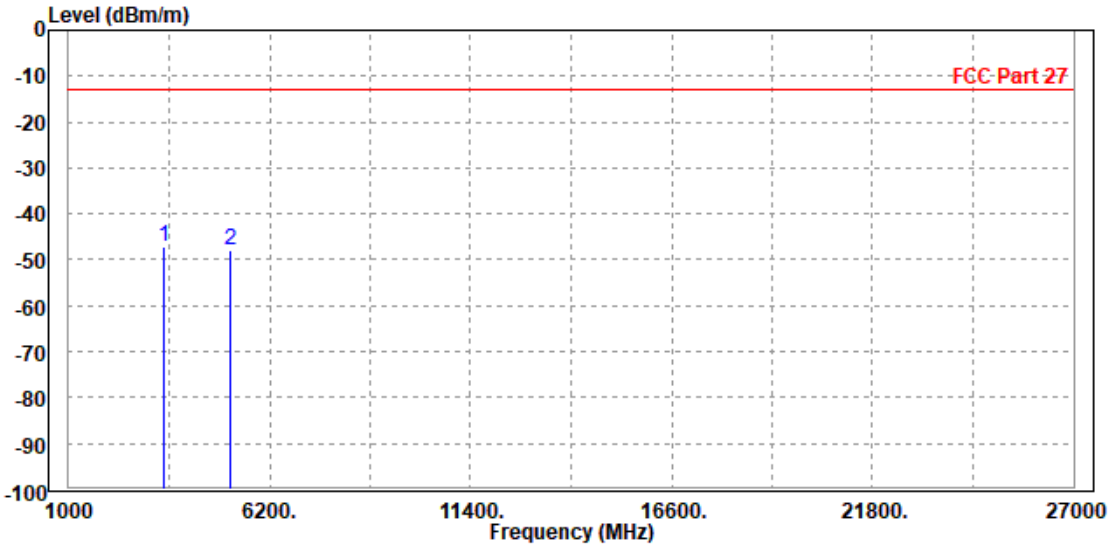
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP 3470.000	-46.54	-55.70	-13.00	-33.54	9.16	Peak	Vertical
2	5197.500	-48.36	-58.18	-13.00	-35.36	9.82	Peak	Vertical



CHANNEL BANDWIDTH: 10MHz / QPSK

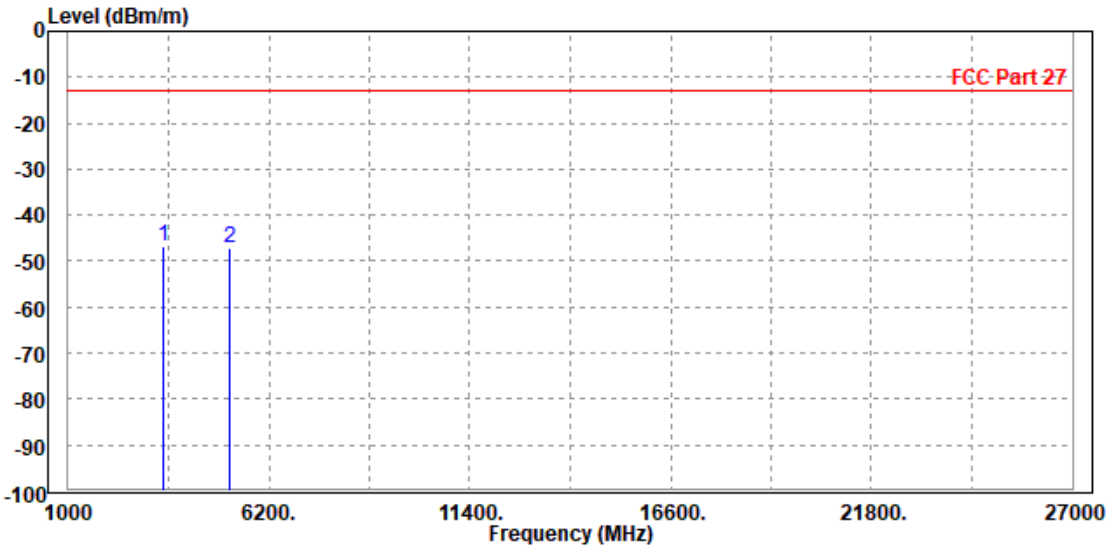
MODE	TX channel 20175	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60Hz
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP 3470.000	-47.16	-55.74	-13.00	-34.16	8.58	Peak	Horizontal
2	5197.500	-47.92	-57.04	-13.00	-34.92	9.12	Peak	Horizontal



MODE	TX channel 20175	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60Hz
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

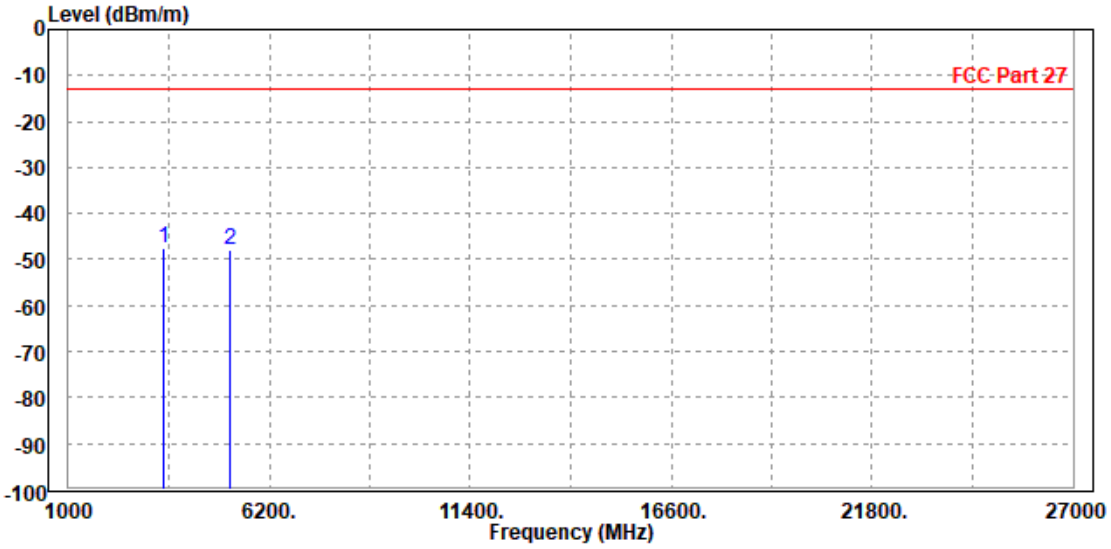
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP 3470.000	-46.82	-55.98	-13.00	-33.82	9.16	Peak	Vertical
2	5197.500	-47.03	-56.85	-13.00	-34.03	9.82	Peak	Vertical



CHANNEL BANDWIDTH: 15MHz / QPSK

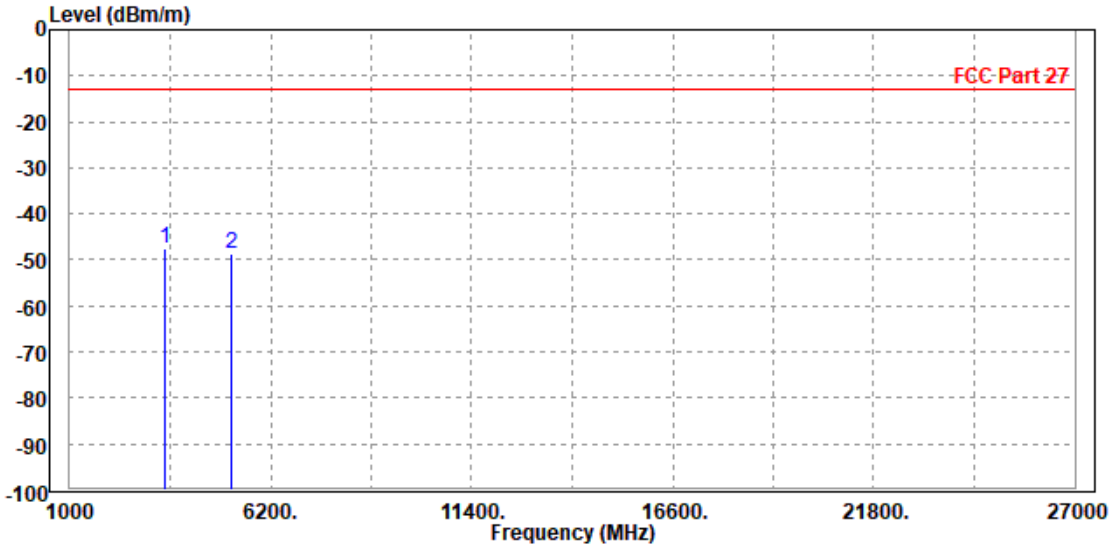
MODE	TX channel 20175	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60Hz
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP 3470.000	-47.62	-56.20	-13.00	-34.62	8.58	Peak	Horizontal
2	5197.500	-47.95	-57.07	-13.00	-34.95	9.12	Peak	Horizontal



MODE	TX channel 20175	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60Hz
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

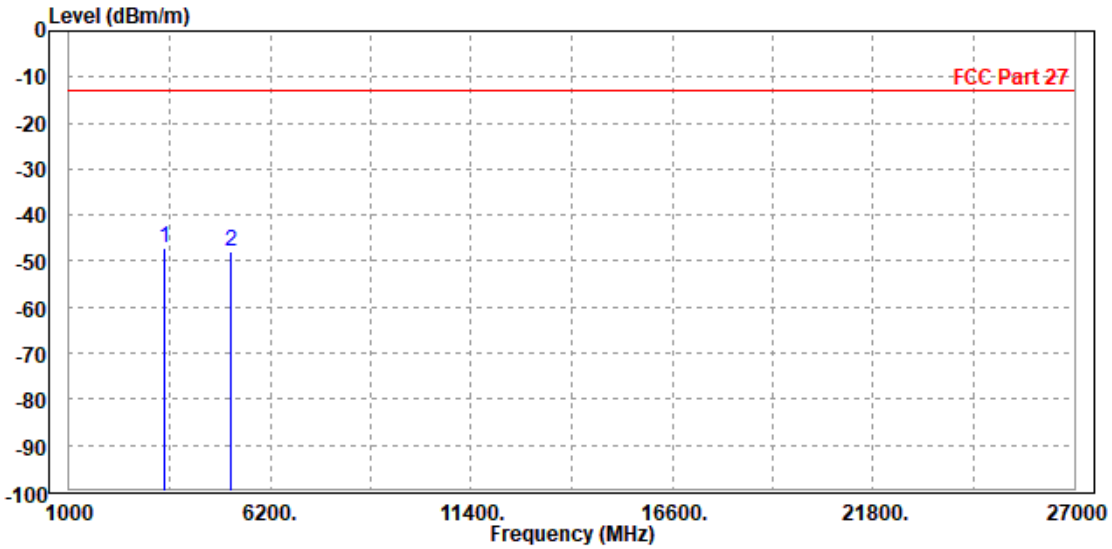
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP 3470.000	-47.43	-56.59	-13.00	-34.43	9.16	Peak	Vertical
2	5197.500	-48.55	-58.37	-13.00	-35.55	9.82	Peak	Vertical



CHANNEL BANDWIDTH: 20MHz / QPSK

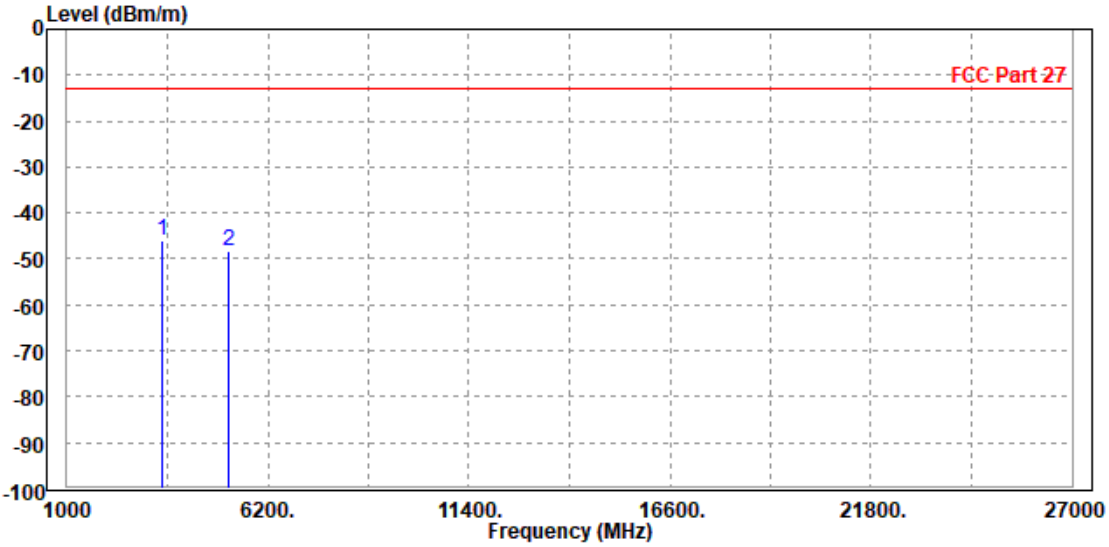
MODE	TX channel 20175	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60Hz
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP	3470.000	-47.20	-55.78	-13.00	-34.20	8.58	Peak	Horizontal
2		5197.500	-48.06	-57.18	-13.00	-35.06	9.12	Peak	Horizontal



MODE	TX channel 20175	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60Hz
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP 3470.000	-46.20	-55.36	-13.00	-33.20	9.16	Peak	Vertical
2	5197.500	-48.17	-57.99	-13.00	-35.17	9.82	Peak	Vertical



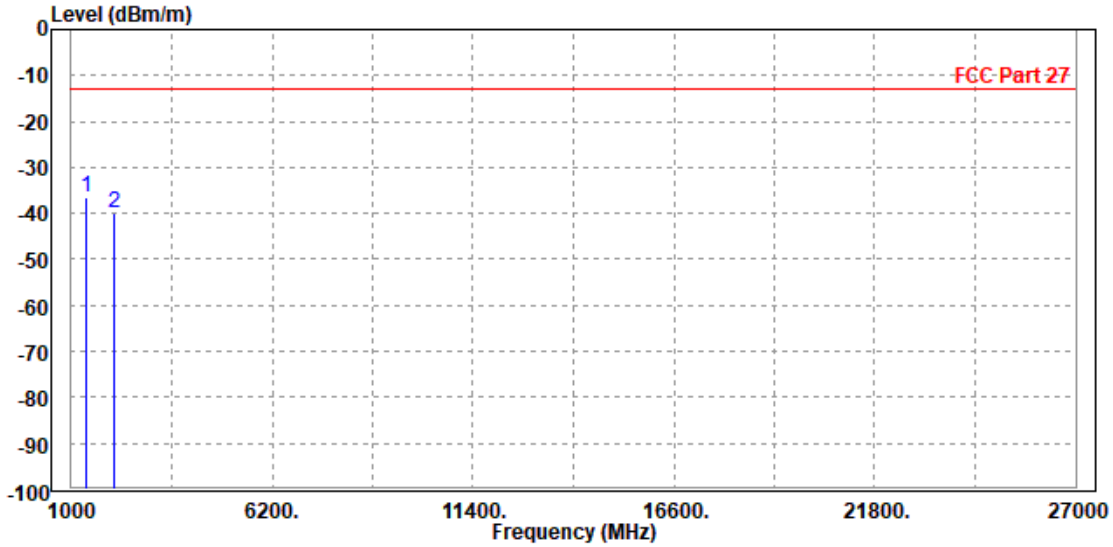
LTE BAND 12

CHANNEL BANDWIDTH: 1.4MHz / QPSK

CH23017

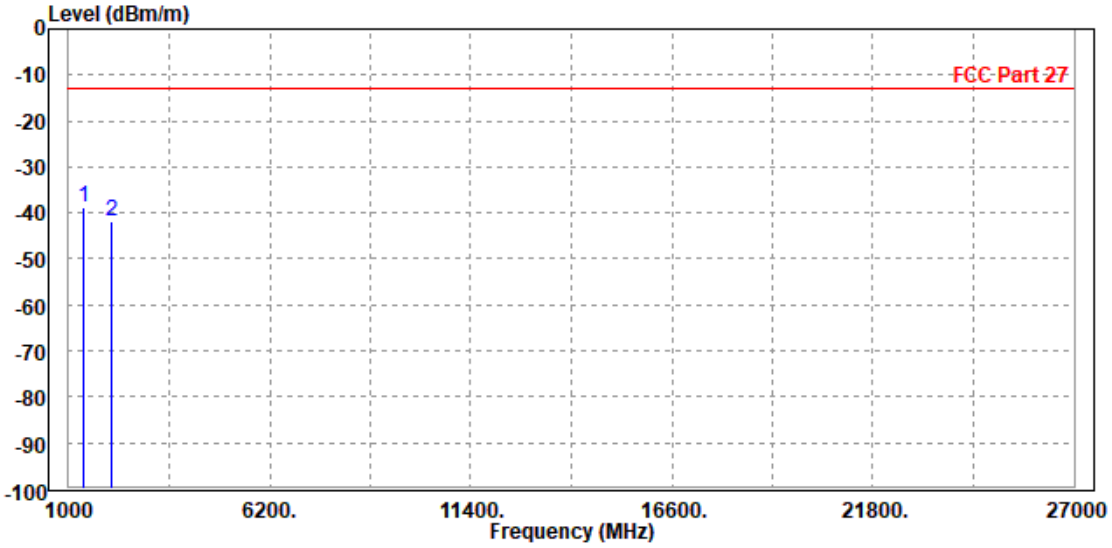
MODE	TX channel 23017	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP 1390.000	-36.66	-37.63	-13.00	-23.66	0.97	Peak	Horizontal
2	2099.100	-39.93	-47.58	-13.00	-26.93	7.65	Peak	Horizontal



MODE	TX channel 23017	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

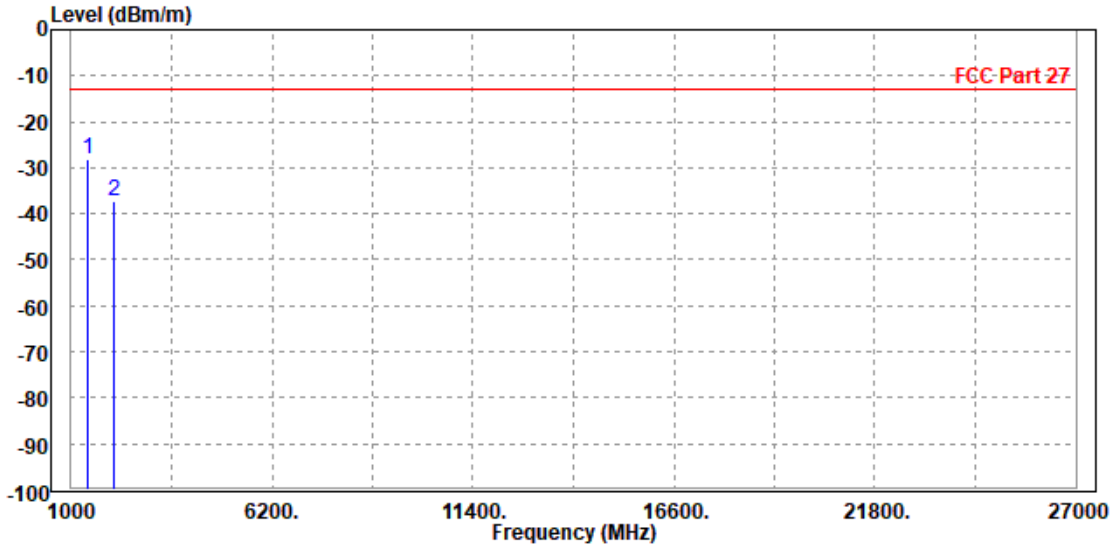
		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP	1399.400	-38.89	-40.51	-13.00	-25.89	1.62	Peak	Vertical
2		2099.100	-41.95	-48.61	-13.00	-28.95	6.66	Peak	Vertical



CH23095

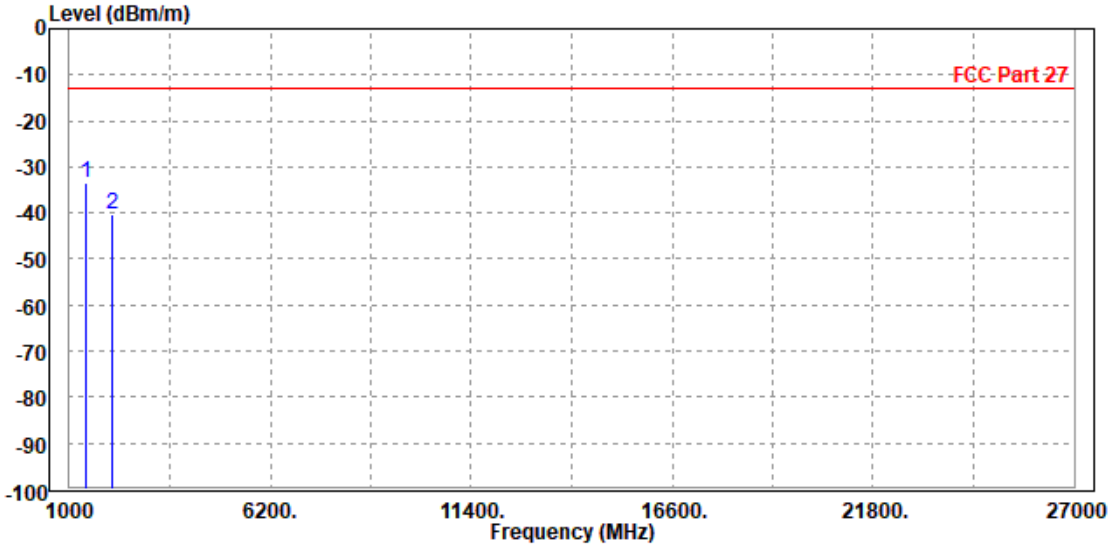
MODE	TX channel 23095	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP 1415.000	-28.31	-29.38	-13.00	-15.31	1.07	Peak	Horizontal
2	2118.000	-37.28	-44.95	-13.00	-24.28	7.67	Peak	Horizontal



MODE	TX channel 23095	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

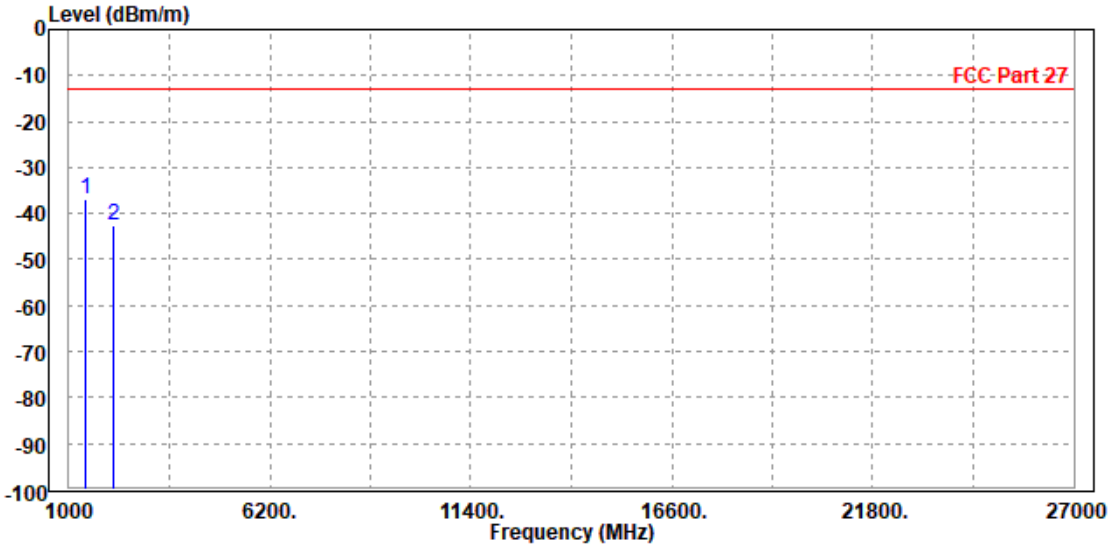
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP 1416.000	-33.44	-35.13	-13.00	-20.44	1.69	Peak	Vertical
2	2122.500	-40.26	-46.95	-13.00	-27.26	6.69	Peak	Vertical



CH23173

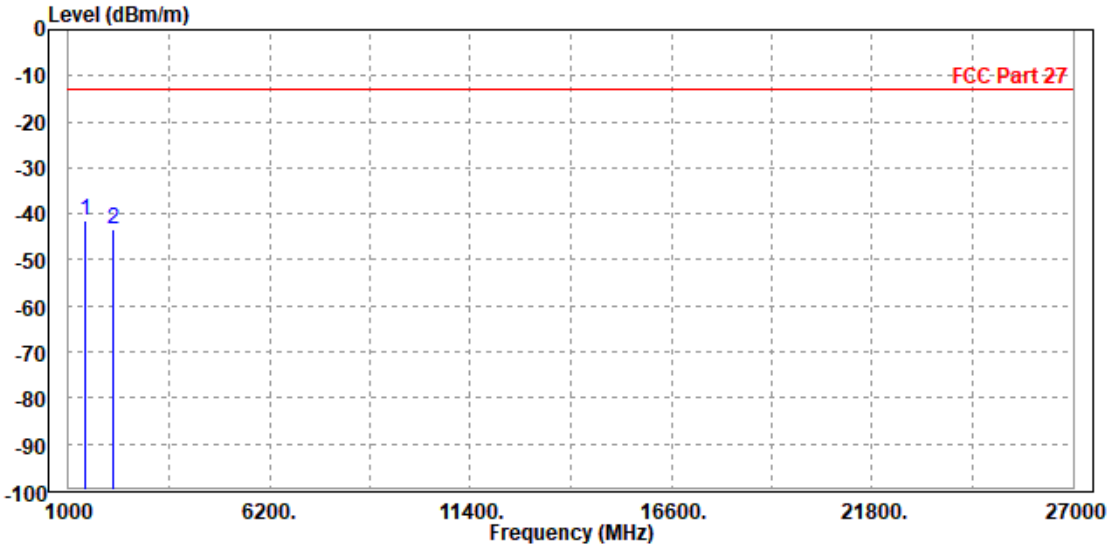
MODE	TX channel 23173	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP 1442.000	-36.88	-38.07	-13.00	-23.88	1.19	Peak	Horizontal
2	2145.900	-42.51	-50.20	-13.00	-29.51	7.69	Peak	Horizontal



MODE	TX channel 23173	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

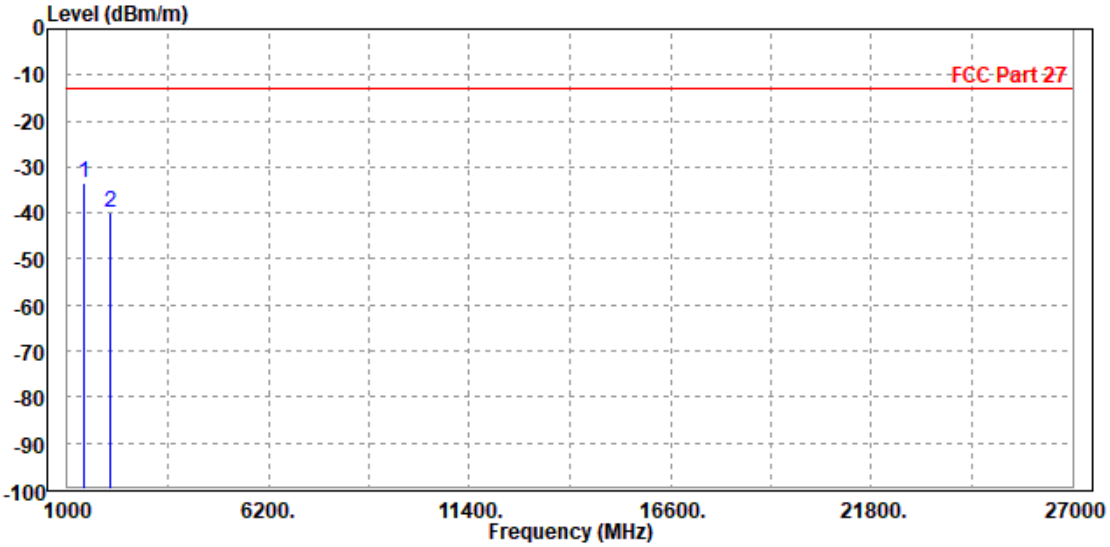
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP 1442.000	-41.56	-43.36	-13.00	-28.56	1.80	Peak	Vertical
2	2145.900	-43.23	-49.94	-13.00	-30.23	6.71	Peak	Vertical



CHANNEL BANDWIDTH: 3MHz / QPSK

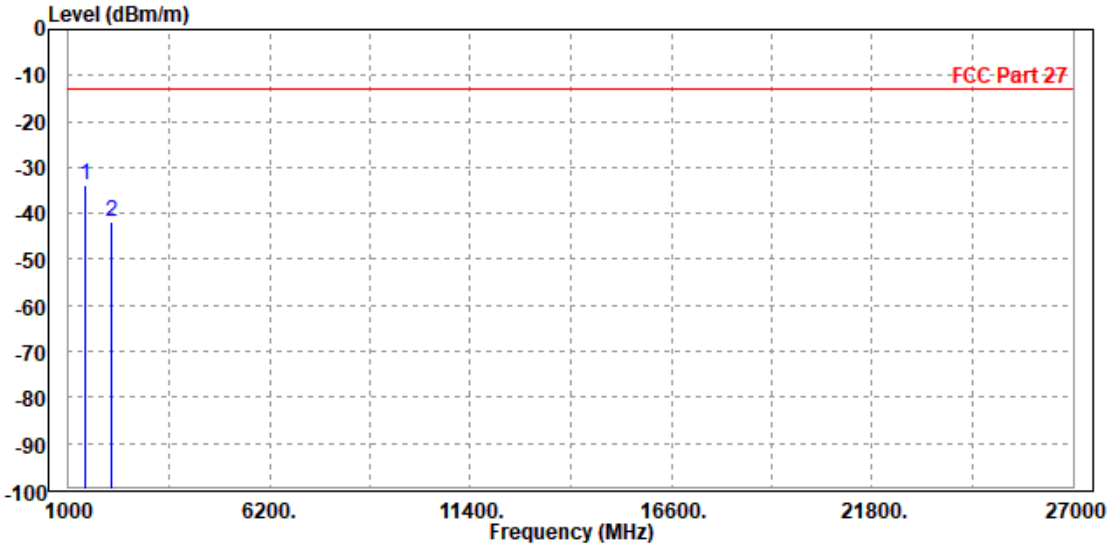
MODE	TX channel 23095	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

		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	-33.59	-34.67	-13.00	-20.59	1.08	Peak	Horizontal
2		2122.500	-39.98	-47.65	-13.00	-26.98	7.67	Peak	Horizontal



Temperature(℃): 23 Humidity(%):70
Test By : Star
Reviewer By : Simon.wang

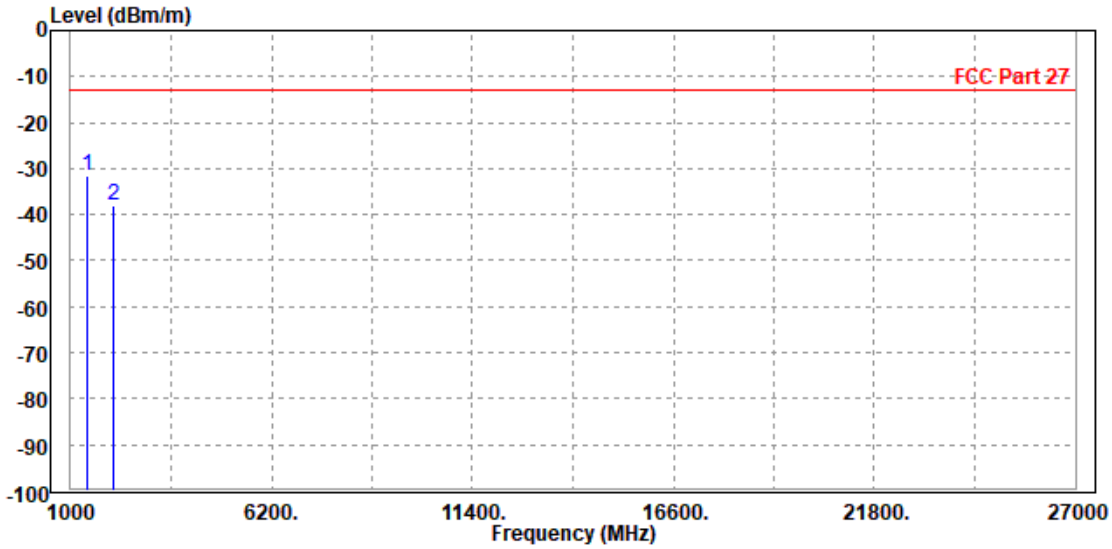
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	1414.000	-45.07	-46.75	-13.00	-32.07	1.68	Peak	Vertical
2 PP	2122.000	-32.94	-39.63	-13.00	-19.94	6.69	Peak	Vertical



CHANNEL BANDWIDTH: 5MHz / QPSK

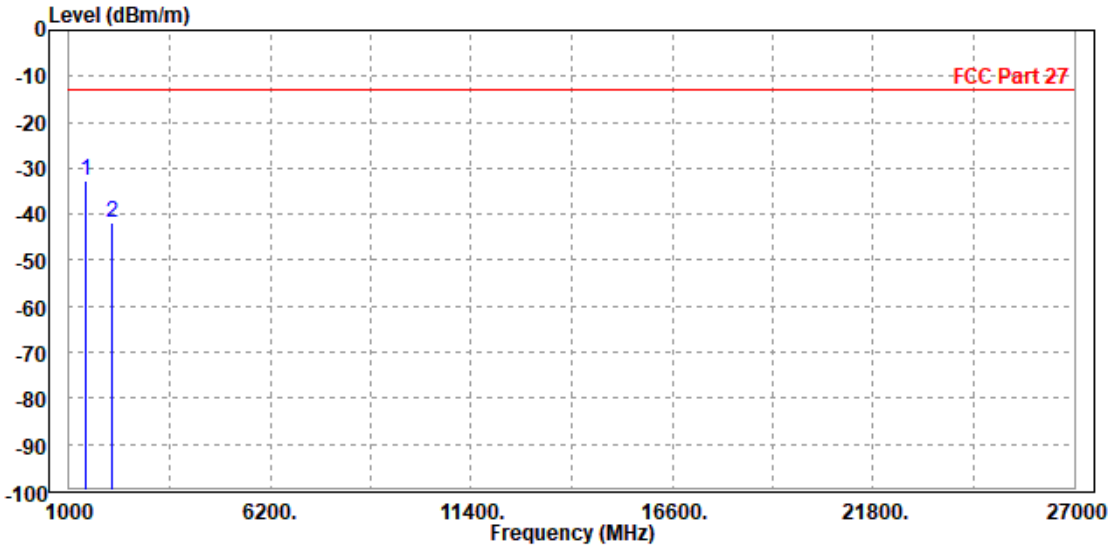
MODE	TX channel 23095	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	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	-31.42	-32.50	-13.00	-18.42	1.08	Peak	Horizontal
2	2122.500	-37.86	-45.53	-13.00	-24.86	7.67	Peak	Horizontal



MODE	TX channel 23095	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

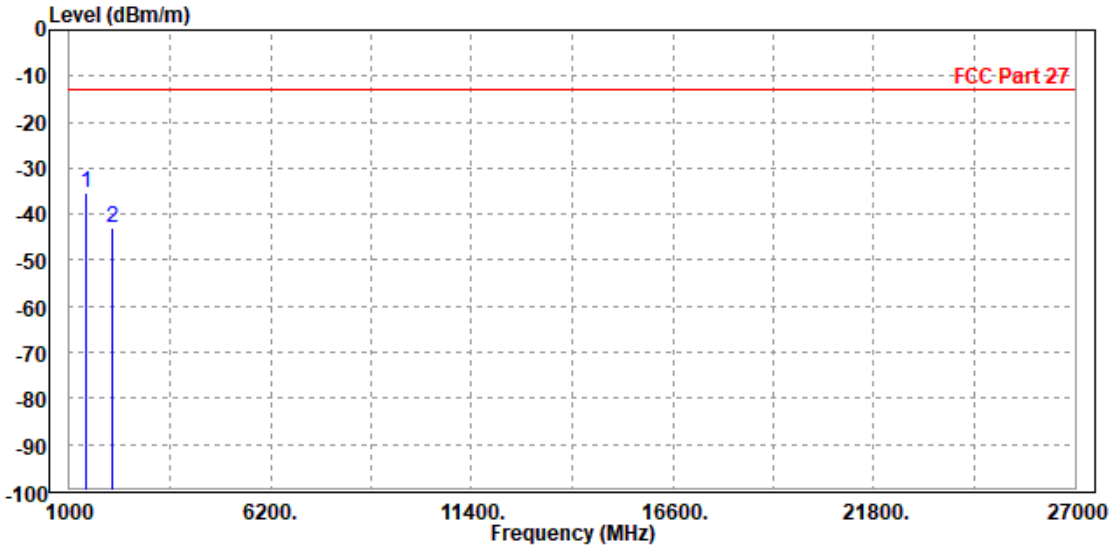
		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP	1416.000	-32.75	-34.44	-13.00	-19.75	1.69	Peak	Vertical
2		2118.000	-41.89	-48.57	-13.00	-28.89	6.68	Peak	Vertical



CHANNEL BANDWIDTH: 10MHz / QPSK

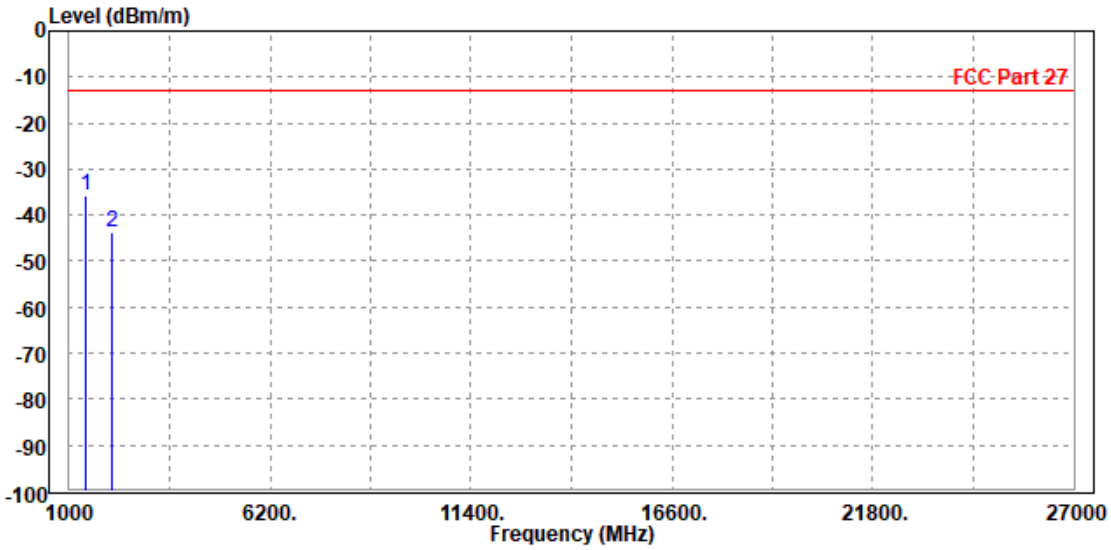
MODE	TX channel 23095	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	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	-35.36	-36.44	-13.00	-22.36	1.08	Peak	Horizontal
2	2122.500	-42.82	-50.49	-13.00	-29.82	7.67	Peak	Horizontal



MODE	TX channel 23095	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
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	-35.85	-37.54	-13.00	-22.85	1.69	Peak	Vertical
2		2122.500	-43.74	-50.43	-13.00	-30.74	6.69	Peak	Vertical



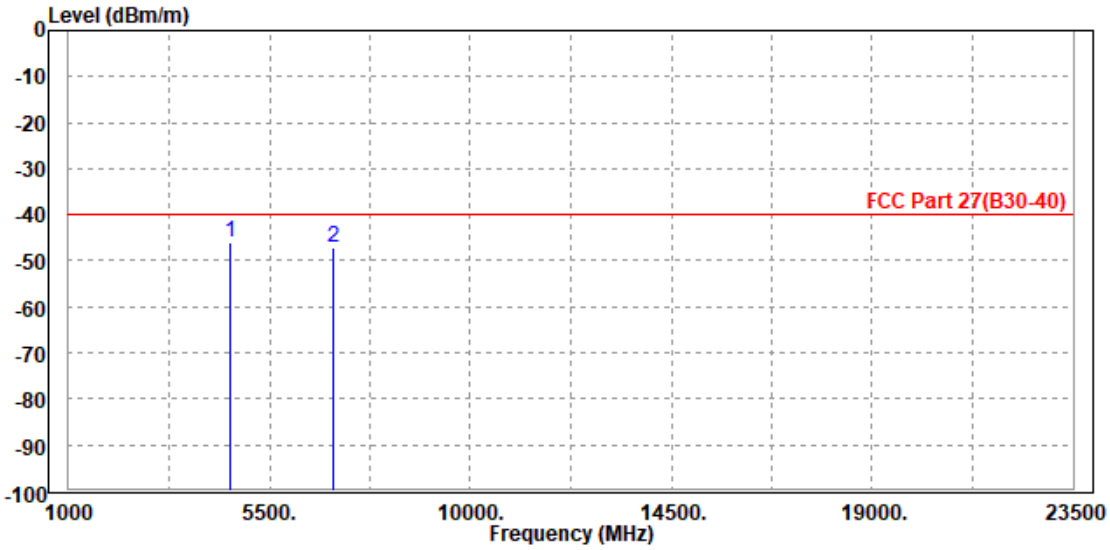
LTE B30

CHANNEL BANDWIDTH: 5MHz / QPSK

CH27685

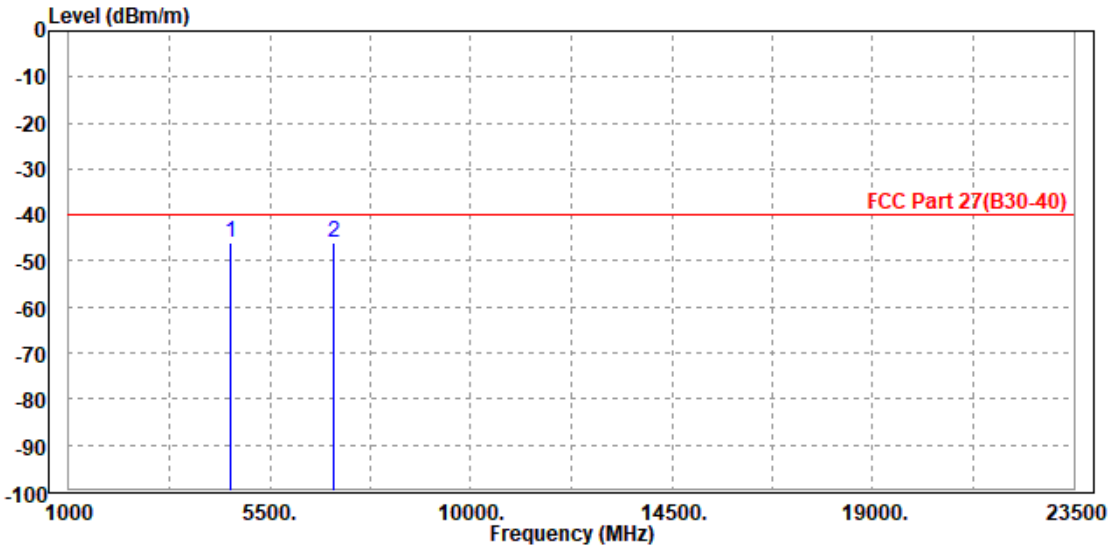
MODE	TX channel 27685	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP 4622.500	-45.97	-55.52	-40.00	-5.97	9.55	Peak	Horizontal
2	6917.500	-47.24	-58.63	-40.00	-7.24	11.39	Peak	Horizontal



MODE	TX channel 27685	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

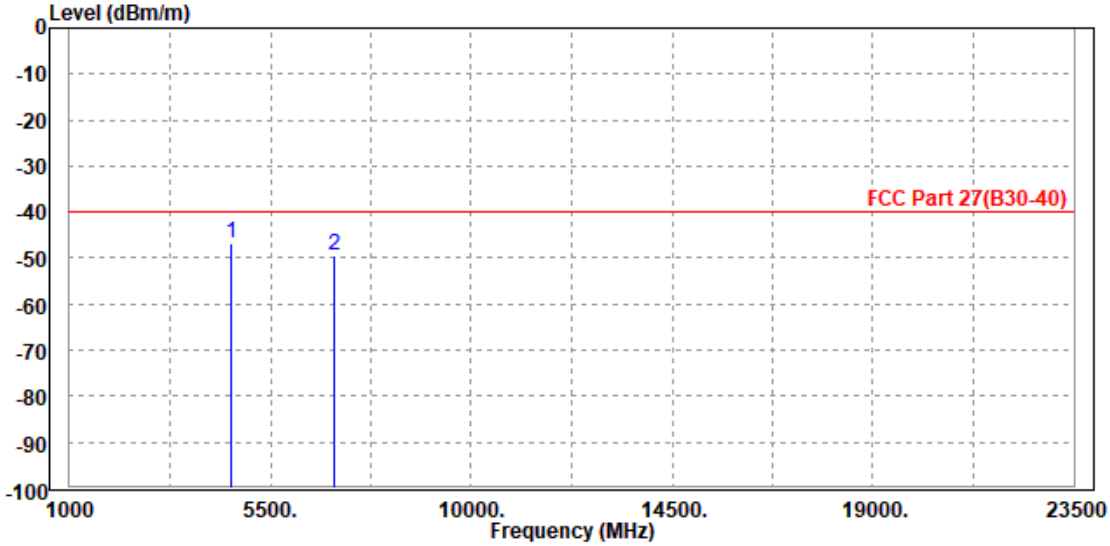
		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP	4622.500	-45.94	-55.88	-40.00	-5.94	9.94	Peak	Vertical
2		6917.500	-46.04	-58.81	-40.00	-6.04	12.77	Peak	Vertical



CH27710

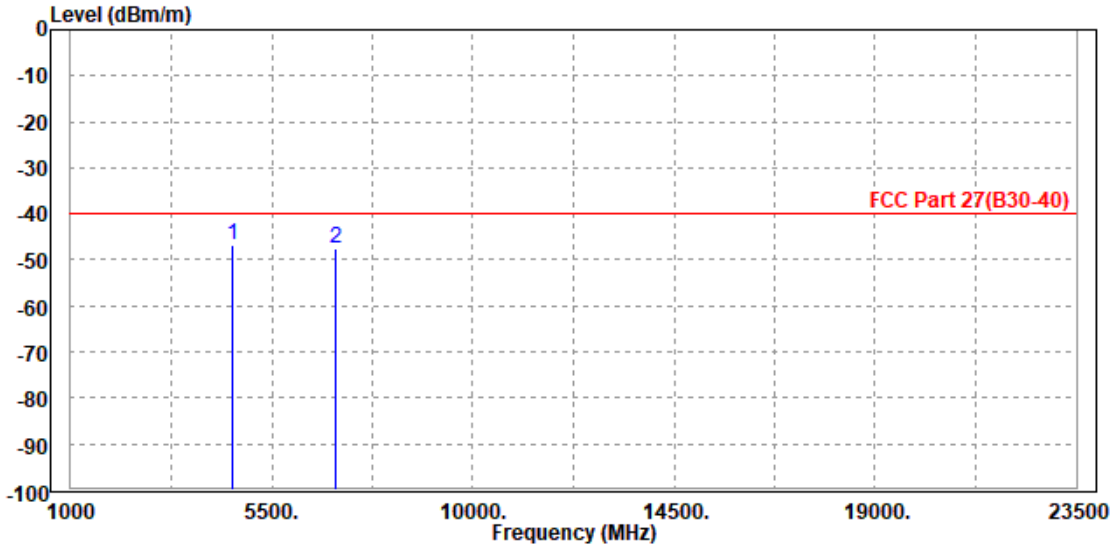
MODE	TX channel 27710	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP 4622.500	-46.58	-56.13	-40.00	-6.58	9.55	Peak	Horizontal
2	6930.000	-49.26	-60.63	-40.00	-9.26	11.37	Peak	Horizontal



MODE	TX channel 27710	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

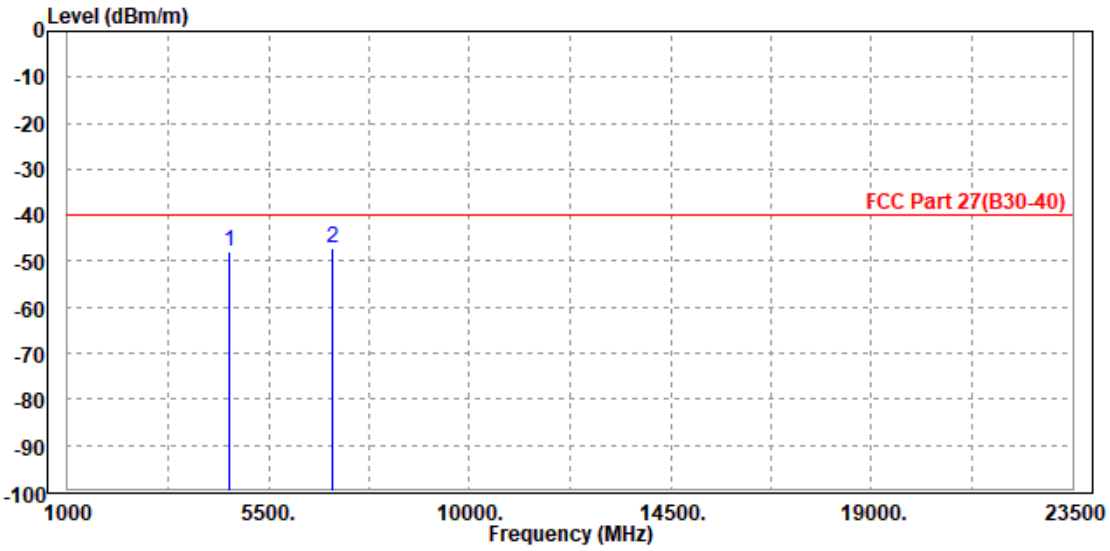
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP 4622.500	-46.93	-56.87	-40.00	-6.93	9.94	Peak	Vertical
2	6930.000	-47.47	-60.25	-40.00	-7.47	12.78	Peak	Vertical



CH27735

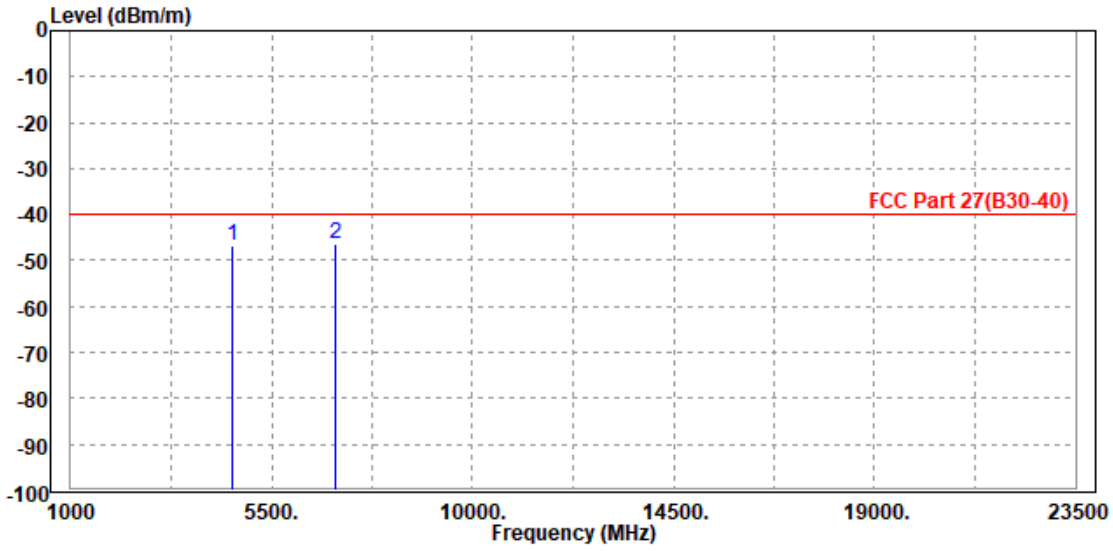
MODE	TX channel 27735	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	4625.000	-48.07	-57.61	-40.00	-8.07	9.54	Peak	Horizontal
2 PP	6940.000	-47.08	-58.43	-40.00	-7.08	11.35	Peak	Horizontal



MODE	TX channel 27735	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

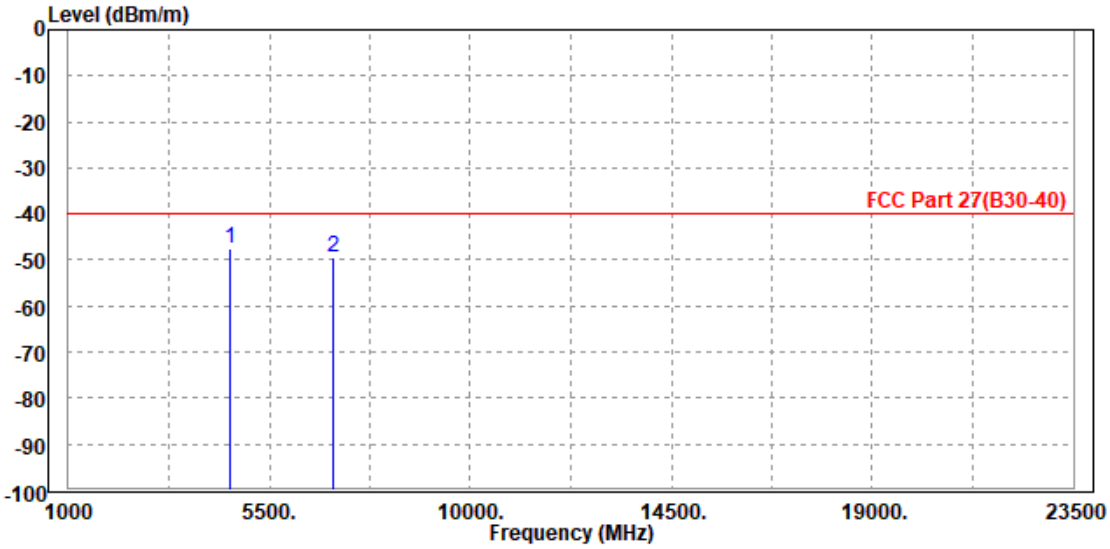
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	4625.000	-46.85	-56.79	-40.00	-6.85	9.94	Peak	Vertical
2 PP	6940.000	-46.38	-59.16	-40.00	-6.38	12.78	Peak	Vertical



CHANNEL BANDWIDTH: 10MHz / QPSK

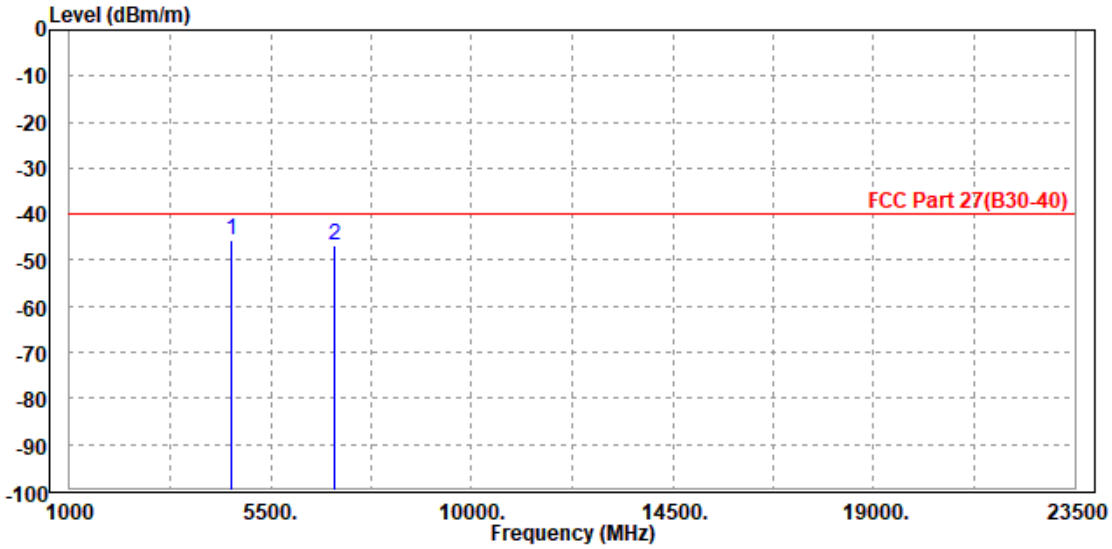
MODE	TX channel 27710	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP 4622.500	-47.44	-56.99	-40.00	-7.44	9.55	Peak	Horizontal
2	6930.000	-49.33	-60.70	-40.00	-9.33	11.37	Peak	Horizontal



MODE	TX channel 27710	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
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 4622.500	-45.62	-55.56	-40.00	-5.62	9.94	Peak	Vertical
2	6930.000	-46.88	-59.66	-40.00	-6.88	12.78	Peak	Vertical

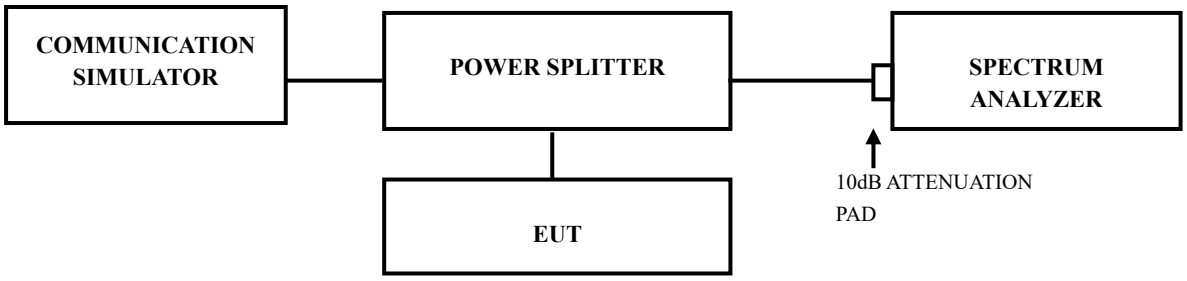


3.7 PEAK TO AVERAGE RATIO

3.7.1 LIMITS OF PEAK TO AVERAGE RATIO MEASUREMENT

In measuring transmissions in this band using an average power technique, the peak to-average ratio (PAR) of the transmission may not exceed 13 dB

3.7.2 TEST SETUP



3.7.3 TEST PROCEDURES

1. Set resolution/measurement bandwidth ≥ signal's occupied bandwidth;
2. Set the number of counts to a value that stabilizes the measured CCDF curve;
3. Record the maximum PAPR level associated with a probability of 0.1%.

3.7.4 TEST RESULTS

Please Refer to Appendix Of this test report.

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@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.

6 APPENDIX

APPENDIX A : LTE Band4

Frequency Stability

B4_1.4MHz

Test Result

Band: 4 / Bandwidth: 1.4MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	1710.7	6	0	20	3.27	-8.60	-0.01	-2.5 to 2.5	Pass
					3.85	-20.39	-0.01	-2.5 to 2.5	Pass
					4.43	-8.57	-0.01	-2.5 to 2.5	Pass
				-10	3.85	-5.59	-0.00	-2.5 to 2.5	Pass
				0	3.85	-5.29	-0.00	-2.5 to 2.5	Pass
				10	3.85	-2.62	-0.00	-2.5 to 2.5	Pass
				30	3.85	-2.33	-0.00	-2.5 to 2.5	Pass
				40	3.85	-1.16	-0.00	-2.5 to 2.5	Pass
				50	3.85	-6.94	-0.00	-2.5 to 2.5	Pass
	1732.5	6	0	20	3.27	-0.52	-0.00	-2.5 to 2.5	Pass
					3.85	-21.14	-0.01	-2.5 to 2.5	Pass
					4.43	-13.09	-0.01	-2.5 to 2.5	Pass
				-10	3.85	-11.30	-0.01	-2.5 to 2.5	Pass
				0	3.85	-0.86	-0.00	-2.5 to 2.5	Pass
				10	3.85	-1.30	-0.00	-2.5 to 2.5	Pass
				30	3.85	-0.87	-0.00	-2.5 to 2.5	Pass
				40	3.85	-3.55	-0.00	-2.5 to 2.5	Pass

				50	3.85	2.79	0.00	-2.5 to 2.5	Pass
	1754.3	6	0	20	3.27	-5.09	-0.00	-2.5 to 2.5	Pass
					3.85	-16.81	-0.01	-2.5 to 2.5	Pass
					4.43	-10.81	-0.01	-2.5 to 2.5	Pass
				-10	3.85	-3.16	-0.00	-2.5 to 2.5	Pass
				0	3.85	0.90	0.00	-2.5 to 2.5	Pass
				10	3.85	-4.21	-0.00	-2.5 to 2.5	Pass
				30	3.85	-4.72	-0.00	-2.5 to 2.5	Pass
				40	3.85	-4.52	-0.00	-2.5 to 2.5	Pass
				50	3.85	-6.70	-0.00	-2.5 to 2.5	Pass
16QAM	1710.7	6	0	20	3.27	-5.19	-0.00	-2.5 to 2.5	Pass
					3.85	2.59	0.00	-2.5 to 2.5	Pass
					4.43	-4.71	-0.00	-2.5 to 2.5	Pass
				-10	3.85	0.47	0.00	-2.5 to 2.5	Pass
				0	3.85	-2.75	-0.00	-2.5 to 2.5	Pass
				10	3.85	-8.11	-0.00	-2.5 to 2.5	Pass
				30	3.85	0.24	0.00	-2.5 to 2.5	Pass
				40	3.85	-3.12	-0.00	-2.5 to 2.5	Pass
				50	3.85	-6.05	-0.00	-2.5 to 2.5	Pass
	1732.5	6	0	20	3.27	-3.58	-0.00	-2.5 to 2.5	Pass
					3.85	-4.51	-0.00	-2.5 to 2.5	Pass
					4.43	-3.90	-0.00	-2.5 to 2.5	Pass
				-10	3.85	-0.69	-0.00	-2.5 to 2.5	Pass
				0	3.85	-4.59	-0.00	-2.5 to 2.5	Pass

				10	3.85	-1.46	-0.00	-2.5 to 2.5	Pass
				30	3.85	-4.66	-0.00	-2.5 to 2.5	Pass
				40	3.85	-2.59	-0.00	-2.5 to 2.5	Pass
				50	3.85	-5.08	-0.00	-2.5 to 2.5	Pass
	1754.3	6	0	20	3.27	-5.82	-0.00	-2.5 to 2.5	Pass
					3.85	-1.34	-0.00	-2.5 to 2.5	Pass
					4.43	-3.50	-0.00	-2.5 to 2.5	Pass
				-10	3.85	-6.18	-0.00	-2.5 to 2.5	Pass
				0	3.85	-4.52	-0.00	-2.5 to 2.5	Pass
				10	3.85	-8.35	-0.00	-2.5 to 2.5	Pass
				30	3.85	-5.65	-0.00	-2.5 to 2.5	Pass
				40	3.85	-5.96	-0.00	-2.5 to 2.5	Pass
				50	3.85	-6.74	-0.00	-2.5 to 2.5	Pass
64QAM	1710.7	6	0	20	3.27	4.19	0.00	-2.5 to 2.5	Pass
					3.85	1.97	0.00	-2.5 to 2.5	Pass
					4.43	-1.65	-0.00	-2.5 to 2.5	Pass
				-10	3.85	-1.27	-0.00	-2.5 to 2.5	Pass
				0	3.85	-8.05	-0.00	-2.5 to 2.5	Pass
				10	3.85	-7.71	-0.00	-2.5 to 2.5	Pass
				30	3.85	-6.37	-0.00	-2.5 to 2.5	Pass
				40	3.85	-4.36	-0.00	-2.5 to 2.5	Pass
				50	3.85	-7.32	-0.00	-2.5 to 2.5	Pass
	1732.5	6	0	20	3.27	-5.31	-0.00	-2.5 to 2.5	Pass
					3.85	-1.62	-0.00	-2.5 to 2.5	Pass

					4.43	-6.11	-0.00	-2.5 to 2.5	Pass
				-10	3.85	-0.60	-0.00	-2.5 to 2.5	Pass
				0	3.85	-5.14	-0.00	-2.5 to 2.5	Pass
				10	3.85	-5.25	-0.00	-2.5 to 2.5	Pass
				30	3.85	-4.95	-0.00	-2.5 to 2.5	Pass
				40	3.85	-9.34	-0.01	-2.5 to 2.5	Pass
				50	3.85	-7.61	-0.00	-2.5 to 2.5	Pass
	1754.3	6	0	20	3.27	-9.14	-0.01	-2.5 to 2.5	Pass
					3.85	-7.27	-0.00	-2.5 to 2.5	Pass
					4.43	-3.83	-0.00	-2.5 to 2.5	Pass
				-10	3.85	-7.30	-0.00	-2.5 to 2.5	Pass
				0	3.85	-10.79	-0.01	-2.5 to 2.5	Pass
				10	3.85	-7.84	-0.00	-2.5 to 2.5	Pass
				30	3.85	-7.87	-0.00	-2.5 to 2.5	Pass
				40	3.85	-4.88	-0.00	-2.5 to 2.5	Pass
				50	3.85	-6.31	-0.00	-2.5 to 2.5	Pass

B4_3MHz

Test Result

Band: 4 / Bandwidth: 3MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	1711.5	15	0	20	3.27	-1.87	-0.00	-2.5 to 2.5	Pass
					3.85	-5.84	-0.00	-2.5 to 2.5	Pass

					4.43	0.03	0.00	-2.5 to 2.5	Pass
				-10	3.85	3.66	0.00	-2.5 to 2.5	Pass
				0	3.85	4.32	0.00	-2.5 to 2.5	Pass
				10	3.85	2.53	0.00	-2.5 to 2.5	Pass
				30	3.85	0.90	0.00	-2.5 to 2.5	Pass
				40	3.85	-0.49	-0.00	-2.5 to 2.5	Pass
				50	3.85	-0.52	-0.00	-2.5 to 2.5	Pass
	1732.5	15	0		3.27	2.19	0.00	-2.5 to 2.5	Pass
				20	3.85	-12.66	-0.01	-2.5 to 2.5	Pass
					4.43	-11.17	-0.01	-2.5 to 2.5	Pass
				-10	3.85	-8.60	-0.01	-2.5 to 2.5	Pass
				0	3.85	-2.23	-0.00	-2.5 to 2.5	Pass
				10	3.85	2.13	0.00	-2.5 to 2.5	Pass
				30	3.85	-0.23	-0.00	-2.5 to 2.5	Pass
				40	3.85	0.19	0.00	-2.5 to 2.5	Pass
				50	3.85	-2.98	-0.00	-2.5 to 2.5	Pass
	1753.5	15	0		3.27	-3.40	-0.00	-2.5 to 2.5	Pass
				20	3.85	-17.72	-0.01	-2.5 to 2.5	Pass
					4.43	-9.51	-0.01	-2.5 to 2.5	Pass
				-10	3.85	-1.83	-0.00	-2.5 to 2.5	Pass
				0	3.85	-2.76	-0.00	-2.5 to 2.5	Pass
				10	3.85	-5.76	-0.00	-2.5 to 2.5	Pass
				30	3.85	-3.32	-0.00	-2.5 to 2.5	Pass
				40	3.85	0.50	0.00	-2.5 to 2.5	Pass

				50	3.85	-2.93	-0.00	-2.5 to 2.5	Pass
16QAM	1711.5	15	0	20	3.27	-3.26	-0.00	-2.5 to 2.5	Pass
					3.85	-1.03	-0.00	-2.5 to 2.5	Pass
					4.43	-4.68	-0.00	-2.5 to 2.5	Pass
				-10	3.85	-6.59	-0.00	-2.5 to 2.5	Pass
				0	3.85	-5.32	-0.00	-2.5 to 2.5	Pass
				10	3.85	-3.09	-0.00	-2.5 to 2.5	Pass
				30	3.85	-5.26	-0.00	-2.5 to 2.5	Pass
				40	3.85	-2.23	-0.00	-2.5 to 2.5	Pass
				50	3.85	-6.92	-0.00	-2.5 to 2.5	Pass
	1732.5	15	0	20	3.27	-4.62	-0.00	-2.5 to 2.5	Pass
					3.85	-2.72	-0.00	-2.5 to 2.5	Pass
					4.43	-0.96	-0.00	-2.5 to 2.5	Pass
				-10	3.85	-7.15	-0.00	-2.5 to 2.5	Pass
				0	3.85	-8.57	-0.00	-2.5 to 2.5	Pass
				10	3.85	-7.91	-0.00	-2.5 to 2.5	Pass
				30	3.85	-5.16	-0.00	-2.5 to 2.5	Pass
				40	3.85	-0.94	-0.00	-2.5 to 2.5	Pass
				50	3.85	-3.58	-0.00	-2.5 to 2.5	Pass
	1753.5	15	0	20	3.27	-4.54	-0.00	-2.5 to 2.5	Pass
					3.85	-5.35	-0.00	-2.5 to 2.5	Pass
					4.43	-6.79	-0.00	-2.5 to 2.5	Pass
				-10	3.85	-7.70	-0.00	-2.5 to 2.5	Pass
				0	3.85	-8.44	-0.00	-2.5 to 2.5	Pass

				10	3.85	-5.31	-0.00	-2.5 to 2.5	Pass
				30	3.85	-9.31	-0.01	-2.5 to 2.5	Pass
				40	3.85	-7.25	-0.00	-2.5 to 2.5	Pass
				50	3.85	-11.02	-0.01	-2.5 to 2.5	Pass
64QAM	1711.5	15	0	20	3.27	-5.52	-0.00	-2.5 to 2.5	Pass
					3.85	-5.04	-0.00	-2.5 to 2.5	Pass
					4.43	-2.30	-0.00	-2.5 to 2.5	Pass
				-10	3.85	-2.69	-0.00	-2.5 to 2.5	Pass
				0	3.85	-4.54	-0.00	-2.5 to 2.5	Pass
				10	3.85	-3.95	-0.00	-2.5 to 2.5	Pass
				30	3.85	-3.92	-0.00	-2.5 to 2.5	Pass
				40	3.85	-2.38	-0.00	-2.5 to 2.5	Pass
				50	3.85	-2.30	-0.00	-2.5 to 2.5	Pass
	1732.5	15	0	20	3.27	-6.41	-0.00	-2.5 to 2.5	Pass
					3.85	-2.38	-0.00	-2.5 to 2.5	Pass
					4.43	1.73	0.00	-2.5 to 2.5	Pass
				-10	3.85	-2.77	-0.00	-2.5 to 2.5	Pass
				0	3.85	-1.99	-0.00	-2.5 to 2.5	Pass
				10	3.85	-2.72	-0.00	-2.5 to 2.5	Pass
				30	3.85	-6.72	-0.00	-2.5 to 2.5	Pass
				40	3.85	-9.23	-0.01	-2.5 to 2.5	Pass
				50	3.85	-8.01	-0.00	-2.5 to 2.5	Pass
	1753.5	15	0	20	3.27	-6.39	-0.00	-2.5 to 2.5	Pass
					3.85	-1.40	-0.00	-2.5 to 2.5	Pass

					4.43	-5.61	-0.00	-2.5 to 2.5	Pass
				-10	3.85	-7.71	-0.00	-2.5 to 2.5	Pass
				0	3.85	0.34	0.00	-2.5 to 2.5	Pass
				10	3.85	-5.15	-0.00	-2.5 to 2.5	Pass
				30	3.85	-9.23	-0.01	-2.5 to 2.5	Pass
				40	3.85	-11.30	-0.01	-2.5 to 2.5	Pass
				50	3.85	-6.45	-0.00	-2.5 to 2.5	Pass

B4_5MHz

Test Result

Band: 4 / Bandwidth: 5MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	1712.5	25	0	20	3.27	-19.24	-0.01	-2.5 to 2.5	Pass
					3.85	-20.01	-0.01	-2.5 to 2.5	Pass
					4.43	-8.78	-0.01	-2.5 to 2.5	Pass
				-10	3.85	-0.73	-0.00	-2.5 to 2.5	Pass
				0	3.85	0.23	0.00	-2.5 to 2.5	Pass
				10	3.85	-2.85	-0.00	-2.5 to 2.5	Pass
				30	3.85	0.13	0.00	-2.5 to 2.5	Pass
				40	3.85	2.00	0.00	-2.5 to 2.5	Pass
				50	3.85	-0.37	-0.00	-2.5 to 2.5	Pass
	1732.5	25	0	20	3.27	1.47	0.00	-2.5 to 2.5	Pass
					3.85	-11.57	-0.01	-2.5 to 2.5	Pass

					4.43	-9.71	-0.01	-2.5 to 2.5	Pass
				-10	3.85	-3.43	-0.00	-2.5 to 2.5	Pass
				0	3.85	-3.16	-0.00	-2.5 to 2.5	Pass
				10	3.85	-1.77	-0.00	-2.5 to 2.5	Pass
				30	3.85	-2.63	-0.00	-2.5 to 2.5	Pass
				40	3.85	-3.60	-0.00	-2.5 to 2.5	Pass
				50	3.85	-3.88	-0.00	-2.5 to 2.5	Pass
	1752.5	25	0	20	3.27	-5.11	-0.00	-2.5 to 2.5	Pass
					3.85	-12.10	-0.01	-2.5 to 2.5	Pass
					4.43	-2.98	-0.00	-2.5 to 2.5	Pass
				-10	3.85	-3.30	-0.00	-2.5 to 2.5	Pass
				0	3.85	-5.52	-0.00	-2.5 to 2.5	Pass
				10	3.85	-5.12	-0.00	-2.5 to 2.5	Pass
				30	3.85	-3.83	-0.00	-2.5 to 2.5	Pass
				40	3.85	-3.42	-0.00	-2.5 to 2.5	Pass
				50	3.85	-5.61	-0.00	-2.5 to 2.5	Pass
16QAM	1712.5	25	0	20	3.27	-2.17	-0.00	-2.5 to 2.5	Pass
					3.85	-3.63	-0.00	-2.5 to 2.5	Pass
					4.43	-6.05	-0.00	-2.5 to 2.5	Pass
				-10	3.85	-4.83	-0.00	-2.5 to 2.5	Pass
				0	3.85	-9.60	-0.01	-2.5 to 2.5	Pass
				10	3.85	-3.48	-0.00	-2.5 to 2.5	Pass
				30	3.85	-5.67	-0.00	-2.5 to 2.5	Pass
				40	3.85	-6.52	-0.00	-2.5 to 2.5	Pass

				50	3.85	-5.42	-0.00	-2.5 to 2.5	Pass
	1732.5	25	0	20	3.27	-5.88	-0.00	-2.5 to 2.5	Pass
					3.85	-1.97	-0.00	-2.5 to 2.5	Pass
					4.43	-3.45	-0.00	-2.5 to 2.5	Pass
				-10	3.85	-4.12	-0.00	-2.5 to 2.5	Pass
				0	3.85	-6.61	-0.00	-2.5 to 2.5	Pass
				10	3.85	-3.93	-0.00	-2.5 to 2.5	Pass
				30	3.85	-3.88	-0.00	-2.5 to 2.5	Pass
				40	3.85	-5.57	-0.00	-2.5 to 2.5	Pass
				50	3.85	-6.70	-0.00	-2.5 to 2.5	Pass
	1752.5	25	0	20	3.27	-5.51	-0.00	-2.5 to 2.5	Pass
					3.85	-4.65	-0.00	-2.5 to 2.5	Pass
					4.43	-9.01	-0.01	-2.5 to 2.5	Pass
				-10	3.85	-6.81	-0.00	-2.5 to 2.5	Pass
				0	3.85	-10.03	-0.01	-2.5 to 2.5	Pass
				10	3.85	-9.24	-0.01	-2.5 to 2.5	Pass
				30	3.85	-5.89	-0.00	-2.5 to 2.5	Pass
				40	3.85	-10.29	-0.01	-2.5 to 2.5	Pass
				50	3.85	-6.68	-0.00	-2.5 to 2.5	Pass
64QAM	1712.5	25	0	20	3.27	-6.31	-0.00	-2.5 to 2.5	Pass
					3.85	-5.49	-0.00	-2.5 to 2.5	Pass
					4.43	-3.63	-0.00	-2.5 to 2.5	Pass
				-10	3.85	-7.60	-0.00	-2.5 to 2.5	Pass
				0	3.85	-2.48	-0.00	-2.5 to 2.5	Pass

				10	3.85	-7.52	-0.00	-2.5 to 2.5	Pass
				30	3.85	-6.15	-0.00	-2.5 to 2.5	Pass
				40	3.85	-3.30	-0.00	-2.5 to 2.5	Pass
				50	3.85	-1.19	-0.00	-2.5 to 2.5	Pass
	1732.5	25	0	20	3.27	-7.40	-0.00	-2.5 to 2.5	Pass
					3.85	-4.32	-0.00	-2.5 to 2.5	Pass
					4.43	-4.16	-0.00	-2.5 to 2.5	Pass
				-10	3.85	-0.36	-0.00	-2.5 to 2.5	Pass
				0	3.85	-8.20	-0.00	-2.5 to 2.5	Pass
				10	3.85	-8.14	-0.00	-2.5 to 2.5	Pass
				30	3.85	-6.38	-0.00	-2.5 to 2.5	Pass
				40	3.85	-8.58	-0.01	-2.5 to 2.5	Pass
				50	3.85	-7.64	-0.00	-2.5 to 2.5	Pass
	1752.5	25	0	20	3.27	-9.57	-0.01	-2.5 to 2.5	Pass
					3.85	-0.63	-0.00	-2.5 to 2.5	Pass
					4.43	-9.46	-0.01	-2.5 to 2.5	Pass
				-10	3.85	-8.25	-0.00	-2.5 to 2.5	Pass
				0	3.85	-7.68	-0.00	-2.5 to 2.5	Pass
				10	3.85	-11.10	-0.01	-2.5 to 2.5	Pass
				30	3.85	-6.67	-0.00	-2.5 to 2.5	Pass
				40	3.85	-12.09	-0.01	-2.5 to 2.5	Pass
				50	3.85	-8.94	-0.01	-2.5 to 2.5	Pass

B4_10MHz

Test Result

Band: 4 / Bandwidth: 10MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	1715	50	0	20	3.27	-14.36	-0.01	-2.5 to 2.5	Pass
					3.85	-6.29	-0.00	-2.5 to 2.5	Pass
					4.43	-1.62	-0.00	-2.5 to 2.5	Pass
				-10	3.85	-4.28	-0.00	-2.5 to 2.5	Pass
				0	3.85	-5.02	-0.00	-2.5 to 2.5	Pass
				10	3.85	-8.93	-0.01	-2.5 to 2.5	Pass
				30	3.85	-8.50	-0.01	-2.5 to 2.5	Pass
				40	3.85	-9.79	-0.01	-2.5 to 2.5	Pass
				50	3.85	-7.40	-0.00	-2.5 to 2.5	Pass
	1732.5	50	0	20	3.27	-5.76	-0.00	-2.5 to 2.5	Pass
					3.85	-6.14	-0.00	-2.5 to 2.5	Pass
					4.43	-4.38	-0.00	-2.5 to 2.5	Pass
				-10	3.85	-3.33	-0.00	-2.5 to 2.5	Pass
				0	3.85	-3.76	-0.00	-2.5 to 2.5	Pass
				10	3.85	-6.61	-0.00	-2.5 to 2.5	Pass
				30	3.85	0.94	0.00	-2.5 to 2.5	Pass
				40	3.85	-0.59	-0.00	-2.5 to 2.5	Pass
				50	3.85	-3.75	-0.00	-2.5 to 2.5	Pass
	1750	50	0	20	3.27	-7.27	-0.00	-2.5 to 2.5	Pass
					3.85	-6.15	-0.00	-2.5 to 2.5	Pass

					4.43	-5.31	-0.00	-2.5 to 2.5	Pass
				-10	3.85	-2.93	-0.00	-2.5 to 2.5	Pass
				0	3.85	-0.93	-0.00	-2.5 to 2.5	Pass
				10	3.85	-6.51	-0.00	-2.5 to 2.5	Pass
				30	3.85	-5.78	-0.00	-2.5 to 2.5	Pass
				40	3.85	-6.77	-0.00	-2.5 to 2.5	Pass
				50	3.85	-5.64	-0.00	-2.5 to 2.5	Pass
16QAM	1715	50	0	20	3.27	-5.55	-0.00	-2.5 to 2.5	Pass
					3.85	-7.22	-0.00	-2.5 to 2.5	Pass
					4.43	-8.70	-0.01	-2.5 to 2.5	Pass
				-10	3.85	-5.79	-0.00	-2.5 to 2.5	Pass
				0	3.85	-7.21	-0.00	-2.5 to 2.5	Pass
				10	3.85	-6.58	-0.00	-2.5 to 2.5	Pass
				30	3.85	-7.91	-0.00	-2.5 to 2.5	Pass
				40	3.85	-5.82	-0.00	-2.5 to 2.5	Pass
				50	3.85	-3.15	-0.00	-2.5 to 2.5	Pass
	1732.5	50	0	20	3.27	-4.56	-0.00	-2.5 to 2.5	Pass
					3.85	-3.65	-0.00	-2.5 to 2.5	Pass
					4.43	-2.63	-0.00	-2.5 to 2.5	Pass
				-10	3.85	-5.05	-0.00	-2.5 to 2.5	Pass
				0	3.85	-0.03	0.00	-2.5 to 2.5	Pass
				10	3.85	-0.43	-0.00	-2.5 to 2.5	Pass
				30	3.85	-5.22	-0.00	-2.5 to 2.5	Pass
				40	3.85	-1.34	-0.00	-2.5 to 2.5	Pass

				50	3.85	-0.52	-0.00	-2.5 to 2.5	Pass
	1750	50	0	20	3.27	-6.34	-0.00	-2.5 to 2.5	Pass
					3.85	-6.35	-0.00	-2.5 to 2.5	Pass
					4.43	-6.64	-0.00	-2.5 to 2.5	Pass
				-10	3.85	-2.85	-0.00	-2.5 to 2.5	Pass
				0	3.85	-6.31	-0.00	-2.5 to 2.5	Pass
				10	3.85	-1.79	-0.00	-2.5 to 2.5	Pass
				30	3.85	-7.15	-0.00	-2.5 to 2.5	Pass
				40	3.85	-2.13	-0.00	-2.5 to 2.5	Pass
				50	3.85	-4.78	-0.00	-2.5 to 2.5	Pass
64QAM	1715	50	0	20	3.27	-6.08	-0.00	-2.5 to 2.5	Pass
					3.85	-7.98	-0.00	-2.5 to 2.5	Pass
					4.43	-6.97	-0.00	-2.5 to 2.5	Pass
				-10	3.85	-7.20	-0.00	-2.5 to 2.5	Pass
				0	3.85	-6.18	-0.00	-2.5 to 2.5	Pass
				10	3.85	-6.92	-0.00	-2.5 to 2.5	Pass
				30	3.85	-7.12	-0.00	-2.5 to 2.5	Pass
				40	3.85	-9.74	-0.01	-2.5 to 2.5	Pass
				50	3.85	-7.80	-0.00	-2.5 to 2.5	Pass
	1732.5	50	0	20	3.27	0.07	0.00	-2.5 to 2.5	Pass
					3.85	-2.42	-0.00	-2.5 to 2.5	Pass
					4.43	-2.22	-0.00	-2.5 to 2.5	Pass
				-10	3.85	-4.39	-0.00	-2.5 to 2.5	Pass
				0	3.85	-1.20	-0.00	-2.5 to 2.5	Pass

				10	3.85	-0.89	-0.00	-2.5 to 2.5	Pass
				30	3.85	-4.58	-0.00	-2.5 to 2.5	Pass
				40	3.85	-7.70	-0.00	-2.5 to 2.5	Pass
				50	3.85	-9.26	-0.01	-2.5 to 2.5	Pass
	1750	50	0	20	3.27	-0.41	-0.00	-2.5 to 2.5	Pass
					3.85	-3.90	-0.00	-2.5 to 2.5	Pass
					4.43	-3.96	-0.00	-2.5 to 2.5	Pass
				-10	3.85	-5.81	-0.00	-2.5 to 2.5	Pass
				0	3.85	-8.34	-0.00	-2.5 to 2.5	Pass
				10	3.85	-4.88	-0.00	-2.5 to 2.5	Pass
				30	3.85	-5.22	-0.00	-2.5 to 2.5	Pass
				40	3.85	-4.66	-0.00	-2.5 to 2.5	Pass
				50	3.85	-9.01	-0.01	-2.5 to 2.5	Pass

B4_15MHz

Test Result

Band: 4 / Bandwidth: 15MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	1717.5	75	0	20	3.27	-12.02	-0.01	-2.5 to 2.5	Pass
					3.85	-7.20	-0.00	-2.5 to 2.5	Pass
					4.43	-3.45	-0.00	-2.5 to 2.5	Pass
				-10	3.85	-0.57	-0.00	-2.5 to 2.5	Pass
				0	3.85	-7.24	-0.00	-2.5 to 2.5	Pass

				10	3.85	-6.14	-0.00	-2.5 to 2.5	Pass
				30	3.85	-4.36	-0.00	-2.5 to 2.5	Pass
				40	3.85	-4.66	-0.00	-2.5 to 2.5	Pass
				50	3.85	-8.08	-0.00	-2.5 to 2.5	Pass
	1732.5	75	0	20	3.27	-6.57	-0.00	-2.5 to 2.5	Pass
					3.85	-6.59	-0.00	-2.5 to 2.5	Pass
					4.43	-4.55	-0.00	-2.5 to 2.5	Pass
				-10	3.85	-4.23	-0.00	-2.5 to 2.5	Pass
				0	3.85	-5.36	-0.00	-2.5 to 2.5	Pass
				10	3.85	-4.15	-0.00	-2.5 to 2.5	Pass
				30	3.85	-6.82	-0.00	-2.5 to 2.5	Pass
				40	3.85	-4.99	-0.00	-2.5 to 2.5	Pass
				50	3.85	-3.25	-0.00	-2.5 to 2.5	Pass
	1747.5	75	0	20	3.27	-8.40	-0.00	-2.5 to 2.5	Pass
					3.85	-6.87	-0.00	-2.5 to 2.5	Pass
					4.43	-5.39	-0.00	-2.5 to 2.5	Pass
				-10	3.85	-6.08	-0.00	-2.5 to 2.5	Pass
				0	3.85	-4.66	-0.00	-2.5 to 2.5	Pass
				10	3.85	-3.06	-0.00	-2.5 to 2.5	Pass
				30	3.85	-4.91	-0.00	-2.5 to 2.5	Pass
				40	3.85	-6.84	-0.00	-2.5 to 2.5	Pass
				50	3.85	-4.79	-0.00	-2.5 to 2.5	Pass
16QAM	1717.5	75	0	20	3.27	-6.52	-0.00	-2.5 to 2.5	Pass
					3.85	-8.34	-0.00	-2.5 to 2.5	Pass

					4.43	-5.99	-0.00	-2.5 to 2.5	Pass
				-10	3.85	-4.58	-0.00	-2.5 to 2.5	Pass
				0	3.85	-8.04	-0.00	-2.5 to 2.5	Pass
				10	3.85	-4.09	-0.00	-2.5 to 2.5	Pass
				30	3.85	-5.45	-0.00	-2.5 to 2.5	Pass
				40	3.85	-8.93	-0.01	-2.5 to 2.5	Pass
				50	3.85	-7.57	-0.00	-2.5 to 2.5	Pass
	1732.5	75	0	20	3.27	-5.28	-0.00	-2.5 to 2.5	Pass
					3.85	-6.59	-0.00	-2.5 to 2.5	Pass
					4.43	-3.53	-0.00	-2.5 to 2.5	Pass
				-10	3.85	-3.93	-0.00	-2.5 to 2.5	Pass
				0	3.85	-4.61	-0.00	-2.5 to 2.5	Pass
				10	3.85	-7.20	-0.00	-2.5 to 2.5	Pass
				30	3.85	-4.95	-0.00	-2.5 to 2.5	Pass
				40	3.85	-7.45	-0.00	-2.5 to 2.5	Pass
				50	3.85	-6.25	-0.00	-2.5 to 2.5	Pass
	1747.5	75	0	20	3.27	-7.00	-0.00	-2.5 to 2.5	Pass
					3.85	-5.01	-0.00	-2.5 to 2.5	Pass
					4.43	-5.52	-0.00	-2.5 to 2.5	Pass
				-10	3.85	-9.47	-0.01	-2.5 to 2.5	Pass
				0	3.85	-6.57	-0.00	-2.5 to 2.5	Pass
				10	3.85	-7.32	-0.00	-2.5 to 2.5	Pass
				30	3.85	-5.05	-0.00	-2.5 to 2.5	Pass
				40	3.85	-6.71	-0.00	-2.5 to 2.5	Pass

				50	3.85	-11.52	-0.01	-2.5 to 2.5	Pass
64QAM	1717.5	75	0	20	3.27	-4.71	-0.00	-2.5 to 2.5	Pass
					3.85	-8.28	-0.00	-2.5 to 2.5	Pass
					4.43	-5.44	-0.00	-2.5 to 2.5	Pass
				-10	3.85	-8.05	-0.00	-2.5 to 2.5	Pass
				0	3.85	-6.04	-0.00	-2.5 to 2.5	Pass
				10	3.85	-8.22	-0.00	-2.5 to 2.5	Pass
				30	3.85	-6.22	-0.00	-2.5 to 2.5	Pass
				40	3.85	-8.34	-0.00	-2.5 to 2.5	Pass
				50	3.85	-4.49	-0.00	-2.5 to 2.5	Pass
	1732.5	75	0	20	3.27	-6.97	-0.00	-2.5 to 2.5	Pass
					3.85	-5.71	-0.00	-2.5 to 2.5	Pass
					4.43	-4.62	-0.00	-2.5 to 2.5	Pass
				-10	3.85	-4.91	-0.00	-2.5 to 2.5	Pass
				0	3.85	-4.41	-0.00	-2.5 to 2.5	Pass
				10	3.85	-3.73	-0.00	-2.5 to 2.5	Pass
				30	3.85	-4.74	-0.00	-2.5 to 2.5	Pass
				40	3.85	-4.25	-0.00	-2.5 to 2.5	Pass
				50	3.85	-5.09	-0.00	-2.5 to 2.5	Pass
	1747.5	75	0	20	3.27	-8.30	-0.00	-2.5 to 2.5	Pass
					3.85	-4.92	-0.00	-2.5 to 2.5	Pass
					4.43	-7.55	-0.00	-2.5 to 2.5	Pass
				-10	3.85	-6.45	-0.00	-2.5 to 2.5	Pass
				0	3.85	-7.18	-0.00	-2.5 to 2.5	Pass

				10	3.85	-6.08	-0.00	-2.5 to 2.5	Pass
				30	3.85	-4.99	-0.00	-2.5 to 2.5	Pass
				40	3.85	-4.61	-0.00	-2.5 to 2.5	Pass
				50	3.85	-5.62	-0.00	-2.5 to 2.5	Pass

B4_20MHz

Test Result

Band: 4 / Bandwidth: 20MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	1720	100	0	20	3.27	-12.39	-0.01	-2.5 to 2.5	Pass
					3.85	-3.58	-0.00	-2.5 to 2.5	Pass
					4.43	-5.08	-0.00	-2.5 to 2.5	Pass
				-10	3.85	-6.21	-0.00	-2.5 to 2.5	Pass
				0	3.85	-5.05	-0.00	-2.5 to 2.5	Pass
				10	3.85	-4.55	-0.00	-2.5 to 2.5	Pass
				30	3.85	-2.53	-0.00	-2.5 to 2.5	Pass
				40	3.85	-4.78	-0.00	-2.5 to 2.5	Pass
				50	3.85	-2.67	-0.00	-2.5 to 2.5	Pass
	1732.5	100	0	20	3.27	-5.95	-0.00	-2.5 to 2.5	Pass
					3.85	-0.06	0.00	-2.5 to 2.5	Pass
					4.43	-2.88	-0.00	-2.5 to 2.5	Pass
				-10	3.85	-4.78	-0.00	-2.5 to 2.5	Pass
				0	3.85	-4.03	-0.00	-2.5 to 2.5	Pass

				10	3.85	-2.99	-0.00	-2.5 to 2.5	Pass
				30	3.85	-3.40	-0.00	-2.5 to 2.5	Pass
				40	3.85	-1.09	-0.00	-2.5 to 2.5	Pass
				50	3.85	-1.06	-0.00	-2.5 to 2.5	Pass
	1745	100	0	20	3.27	-5.92	-0.00	-2.5 to 2.5	Pass
					3.85	-1.26	-0.00	-2.5 to 2.5	Pass
					4.43	-1.82	-0.00	-2.5 to 2.5	Pass
				-10	3.85	-1.16	-0.00	-2.5 to 2.5	Pass
				0	3.85	-4.11	-0.00	-2.5 to 2.5	Pass
				10	3.85	-3.76	-0.00	-2.5 to 2.5	Pass
				30	3.85	-7.14	-0.00	-2.5 to 2.5	Pass
				40	3.85	-2.25	-0.00	-2.5 to 2.5	Pass
				50	3.85	-6.67	-0.00	-2.5 to 2.5	Pass
16QAM	1720	100	0	20	3.27	-5.21	-0.00	-2.5 to 2.5	Pass
					3.85	-4.13	-0.00	-2.5 to 2.5	Pass
					4.43	-9.08	-0.01	-2.5 to 2.5	Pass
				-10	3.85	-8.74	-0.01	-2.5 to 2.5	Pass
				0	3.85	-8.47	-0.00	-2.5 to 2.5	Pass
				10	3.85	-3.02	-0.00	-2.5 to 2.5	Pass
				30	3.85	-5.81	-0.00	-2.5 to 2.5	Pass
				40	3.85	-5.18	-0.00	-2.5 to 2.5	Pass
				50	3.85	-5.62	-0.00	-2.5 to 2.5	Pass
	1732.5	100	0	20	3.27	-0.14	-0.00	-2.5 to 2.5	Pass
					3.85	-3.22	-0.00	-2.5 to 2.5	Pass

					4.43	-5.41	-0.00	-2.5 to 2.5	Pass
				-10	3.85	-1.23	-0.00	-2.5 to 2.5	Pass
				0	3.85	-2.20	-0.00	-2.5 to 2.5	Pass
				10	3.85	-3.55	-0.00	-2.5 to 2.5	Pass
				30	3.85	-3.93	-0.00	-2.5 to 2.5	Pass
				40	3.85	-5.18	-0.00	-2.5 to 2.5	Pass
				50	3.85	-1.23	-0.00	-2.5 to 2.5	Pass
	1745	100	0	20	3.27	-0.09	0.00	-2.5 to 2.5	Pass
					3.85	-3.18	-0.00	-2.5 to 2.5	Pass
					4.43	-1.89	-0.00	-2.5 to 2.5	Pass
				-10	3.85	-4.33	-0.00	-2.5 to 2.5	Pass
				0	3.85	0.21	0.00	-2.5 to 2.5	Pass
				10	3.85	-2.95	-0.00	-2.5 to 2.5	Pass
				30	3.85	-6.79	-0.00	-2.5 to 2.5	Pass
				40	3.85	-1.73	-0.00	-2.5 to 2.5	Pass
				50	3.85	-4.96	-0.00	-2.5 to 2.5	Pass
64QAM	1720	100	0	20	3.27	-7.78	-0.00	-2.5 to 2.5	Pass
					3.85	-6.17	-0.00	-2.5 to 2.5	Pass
					4.43	-3.90	-0.00	-2.5 to 2.5	Pass
				-10	3.85	-3.08	-0.00	-2.5 to 2.5	Pass
				0	3.85	-3.59	-0.00	-2.5 to 2.5	Pass
				10	3.85	-3.79	-0.00	-2.5 to 2.5	Pass
				30	3.85	-3.42	-0.00	-2.5 to 2.5	Pass
				40	3.85	-6.41	-0.00	-2.5 to 2.5	Pass

				50	3.85	-3.83	-0.00	-2.5 to 2.5	Pass
	1732.5	100	0	20	3.27	-5.41	-0.00	-2.5 to 2.5	Pass
					3.85	-3.38	-0.00	-2.5 to 2.5	Pass
					4.43	-5.18	-0.00	-2.5 to 2.5	Pass
				-10	3.85	-5.18	-0.00	-2.5 to 2.5	Pass
				0	3.85	-2.75	-0.00	-2.5 to 2.5	Pass
				10	3.85	-4.83	-0.00	-2.5 to 2.5	Pass
				30	3.85	-5.95	-0.00	-2.5 to 2.5	Pass
				40	3.85	-5.72	-0.00	-2.5 to 2.5	Pass
				50	3.85	-7.61	-0.00	-2.5 to 2.5	Pass
	1745	100	0	20	3.27	-1.83	-0.00	-2.5 to 2.5	Pass
					3.85	-5.54	-0.00	-2.5 to 2.5	Pass
					4.43	-4.16	-0.00	-2.5 to 2.5	Pass
				-10	3.85	-5.84	-0.00	-2.5 to 2.5	Pass
				0	3.85	-4.08	-0.00	-2.5 to 2.5	Pass
				10	3.85	-5.72	-0.00	-2.5 to 2.5	Pass
				30	3.85	-5.57	-0.00	-2.5 to 2.5	Pass
				40	3.85	-6.32	-0.00	-2.5 to 2.5	Pass
				50	3.85	-3.03	-0.00	-2.5 to 2.5	Pass

99% & 26dB Bandwidth

99%_OBW

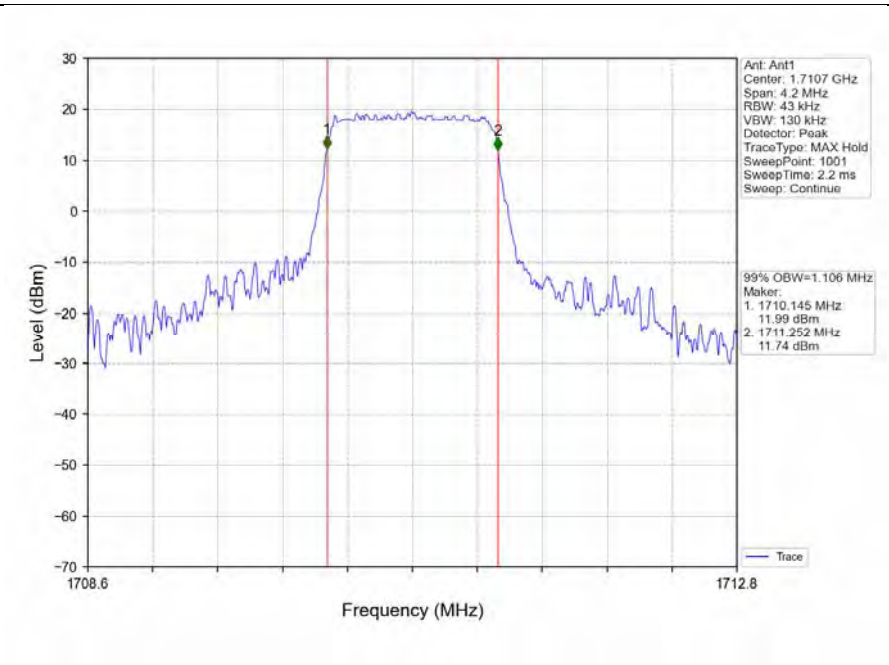
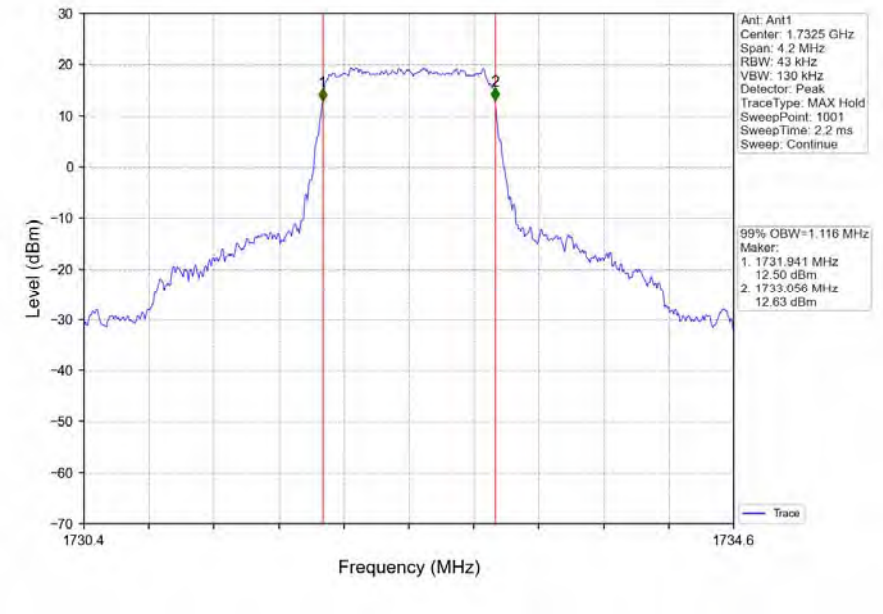
Test Result

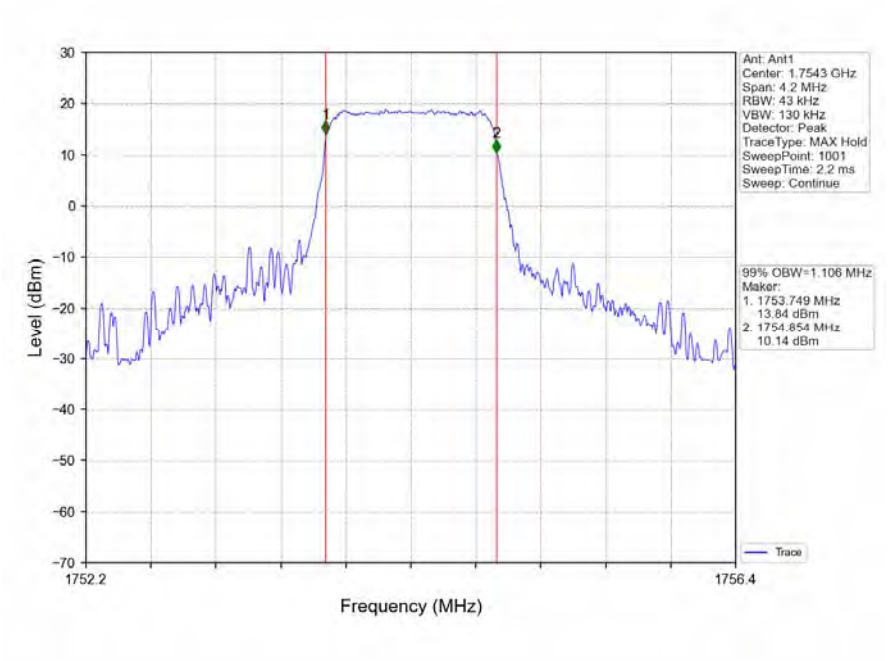
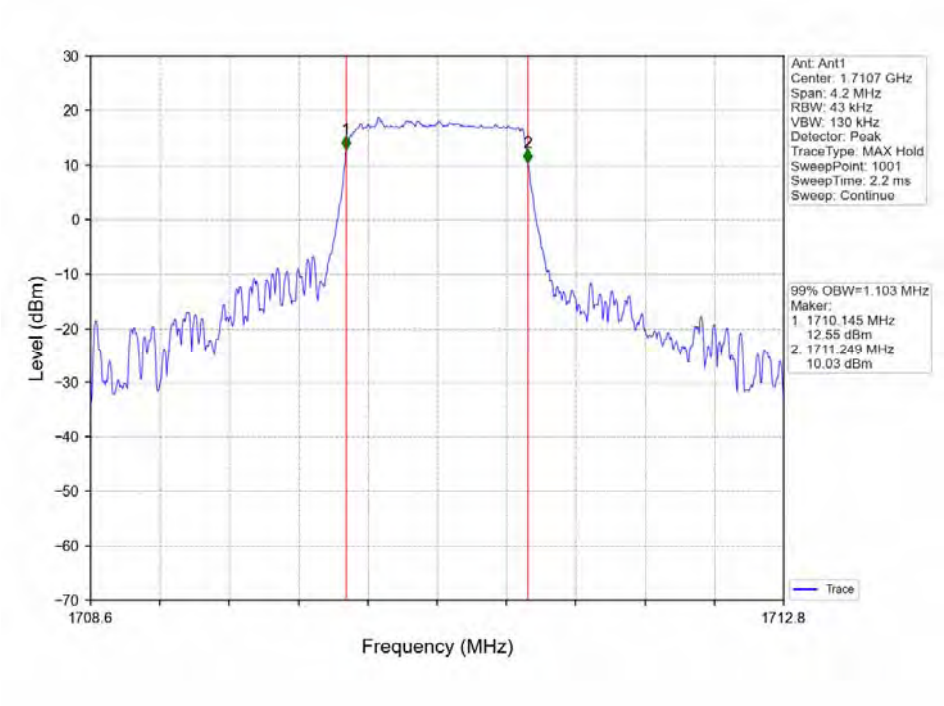
Band: 4 / NTNV						
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)	Verdict
			Size	Offset	Result	
1.4	QPSK	1710.7	6	0	1.106	Pass
		1732.5	6	0	1.116	Pass
		1754.3	6	0	1.106	Pass
	16QAM	1710.7	6	0	1.103	Pass
		1732.5	6	0	1.112	Pass
		1754.3	6	0	1.116	Pass
	64QAM	1710.7	6	0	1.119	Pass
		1732.5	6	0	1.107	Pass
		1754.3	6	0	1.111	Pass
3	QPSK	1711.5	15	0	2.732	Pass
		1732.5	15	0	2.727	Pass
		1753.5	15	0	2.733	Pass
	16QAM	1711.5	15	0	2.727	Pass
		1732.5	15	0	2.721	Pass
		1753.5	15	0	2.719	Pass
	64QAM	1711.5	15	0	2.738	Pass
		1732.5	15	0	2.716	Pass
		1753.5	15	0	2.729	Pass
5	QPSK	1712.5	25	0	4.547	Pass
		1732.5	25	0	4.548	Pass

		1752.5	25	0	4.548	Pass
	16QAM	1712.5	25	0	4.526	Pass
		1732.5	25	0	4.544	Pass
		1752.5	25	0	4.557	Pass
	64QAM	1712.5	25	0	4.534	Pass
		1732.5	25	0	4.540	Pass
		1752.5	25	0	4.541	Pass
10	QPSK	1715	50	0	9.064	Pass
		1732.5	50	0	9.052	Pass
		1750	50	0	9.098	Pass
	16QAM	1715	50	0	9.052	Pass
		1732.5	50	0	9.046	Pass
		1750	50	0	9.060	Pass
	64QAM	1715	50	0	9.056	Pass
		1732.5	50	0	9.025	Pass
		1750	50	0	9.094	Pass
15	QPSK	1717.5	75	0	13.608	Pass
		1732.5	75	0	13.577	Pass
		1747.5	75	0	13.600	Pass
	16QAM	1717.5	75	0	13.605	Pass
		1732.5	75	0	13.605	Pass
		1747.5	75	0	13.638	Pass
	64QAM	1717.5	75	0	13.589	Pass
		1732.5	75	0	13.598	Pass

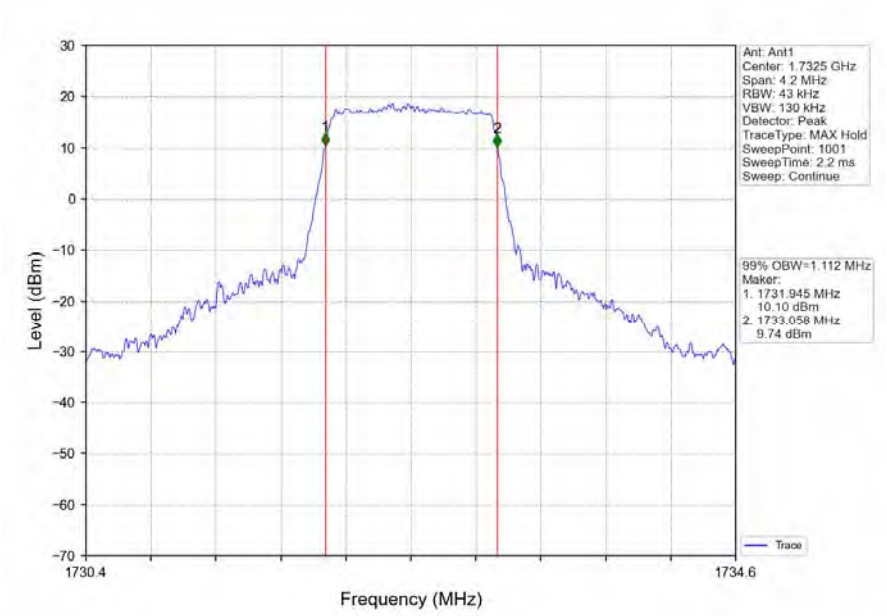
		1747.5	75	0	13.624	Pass
20	QPSK	1720	100	0	18.154	Pass
		1732.5	100	0	18.153	Pass
		1745	100	0	18.162	Pass
	16QAM	1720	100	0	18.190	Pass
		1732.5	100	0	18.099	Pass
		1745	100	0	18.101	Pass
	64QAM	1720	100	0	18.076	Pass
		1732.5	100	0	18.116	Pass
		1745	100	0	18.118	Pass

Test Graph

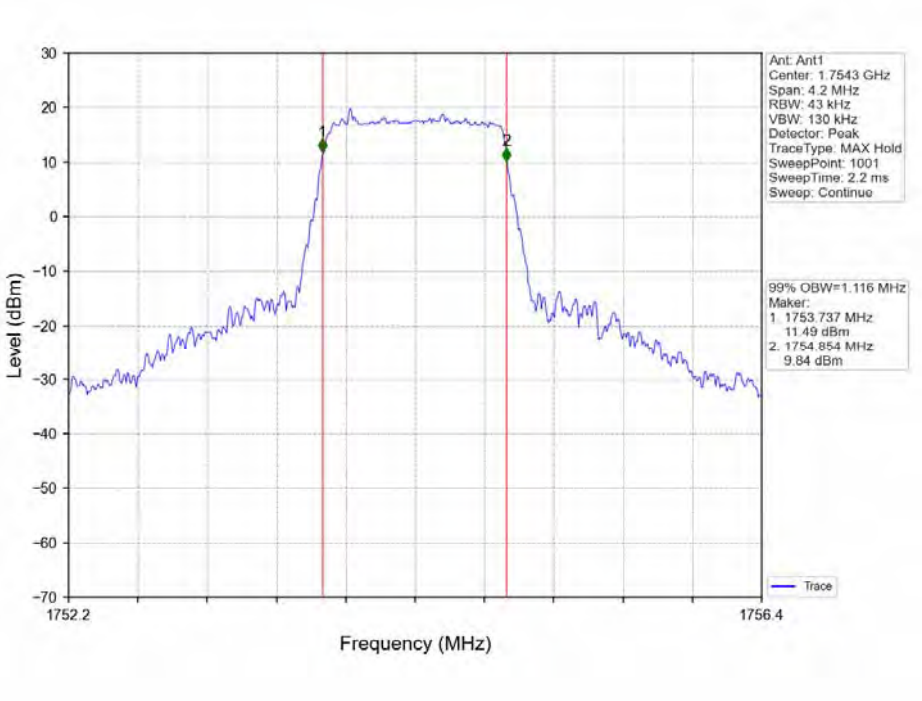
Band4_1.4MHz_QPSK_LCH_1710.7MHz_RB_6_0_NTNV

Band4_1.4MHz_QPSK_MCH_1732.5MHz_RB_6_0_NTNV


Band4_1.4MHz_QPSK_HCH_1754.3MHz_RB_6_0_NTNV

Band4_1.4MHz_16QAM_LCH_1710.7MHz_RB_6_0_NTNV


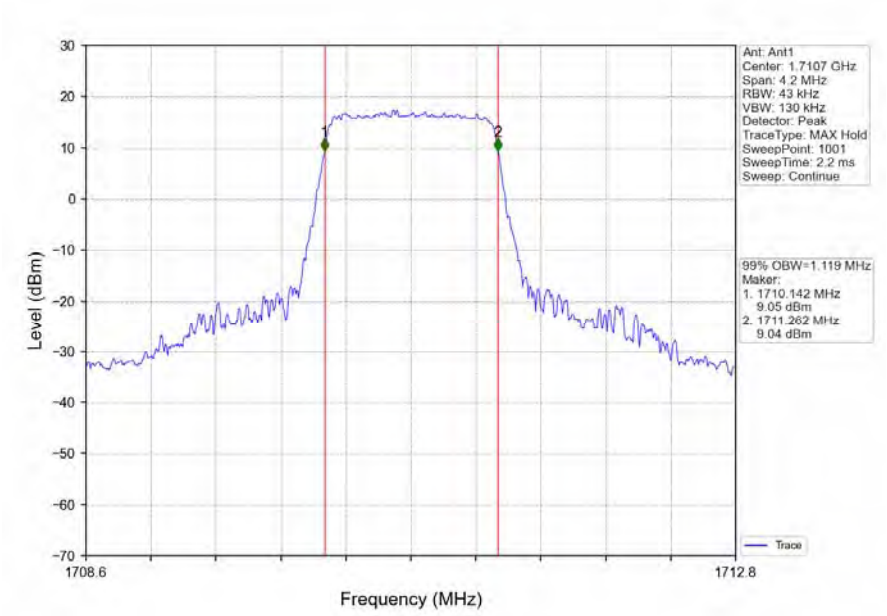
Band4_1.4MHz_16QAM_MCH_1732.5MHz_RB_6_0_NTNV



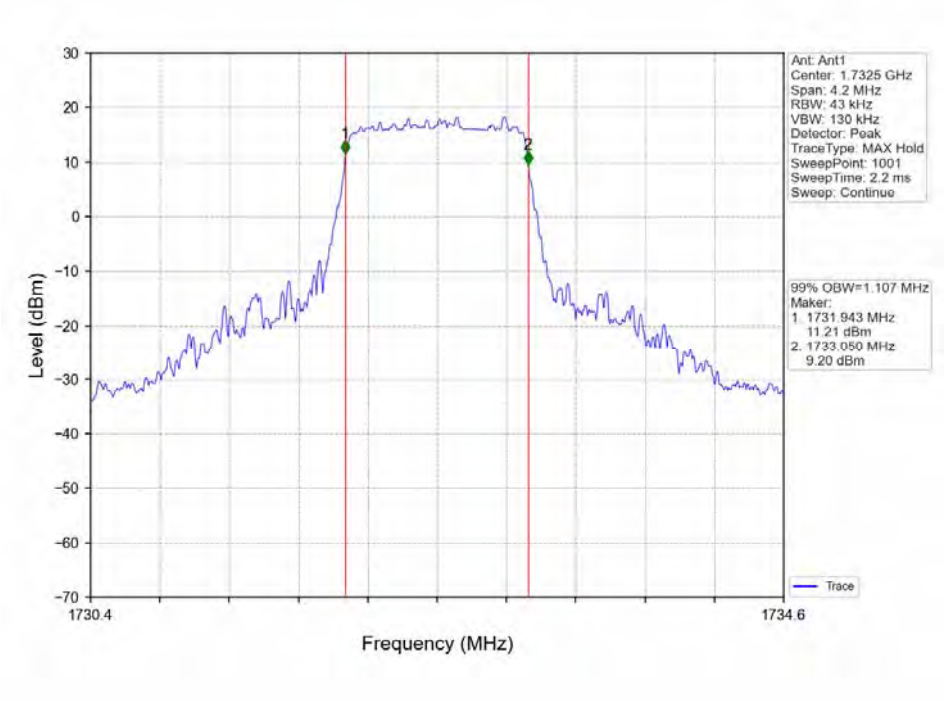
Band4_1.4MHz_16QAM_HCH_1754.3MHz_RB_6_0_NTNV



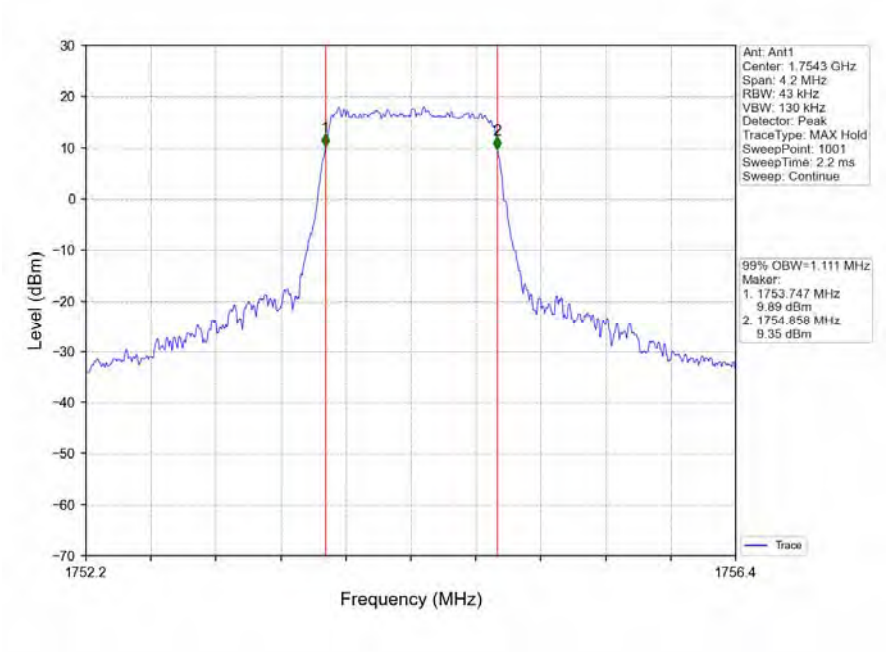
Band4_1.4MHz_64QAM_LCH_1710.7MHz_RB_6_0_NTNV



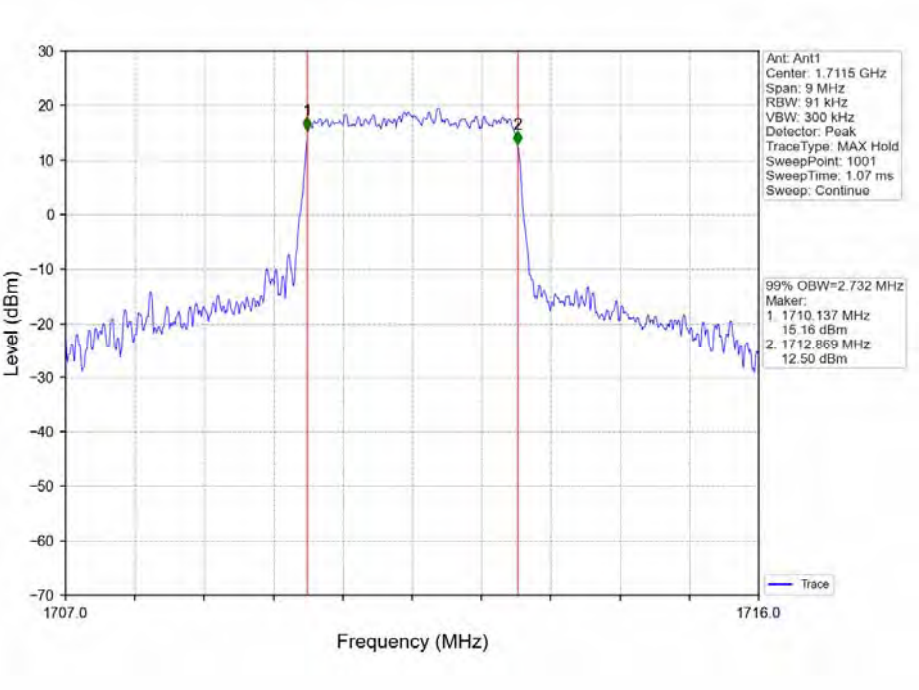
Band4_1.4MHz_64QAM_MCH_1732.5MHz_RB_6_0_NTNV



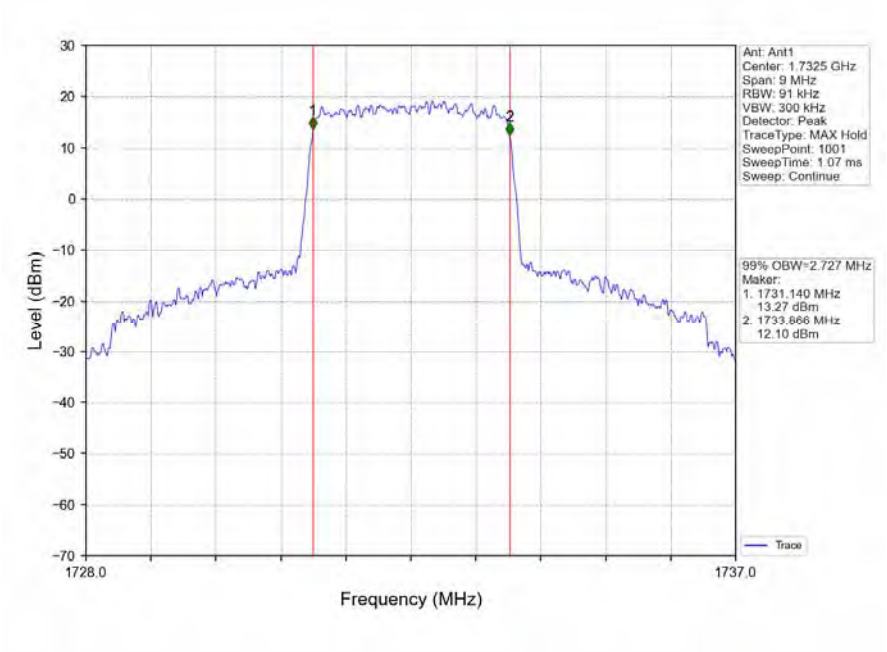
Band4_1.4MHz_64QAM_HCH_1754.3MHz_RB_6_0_NTNV



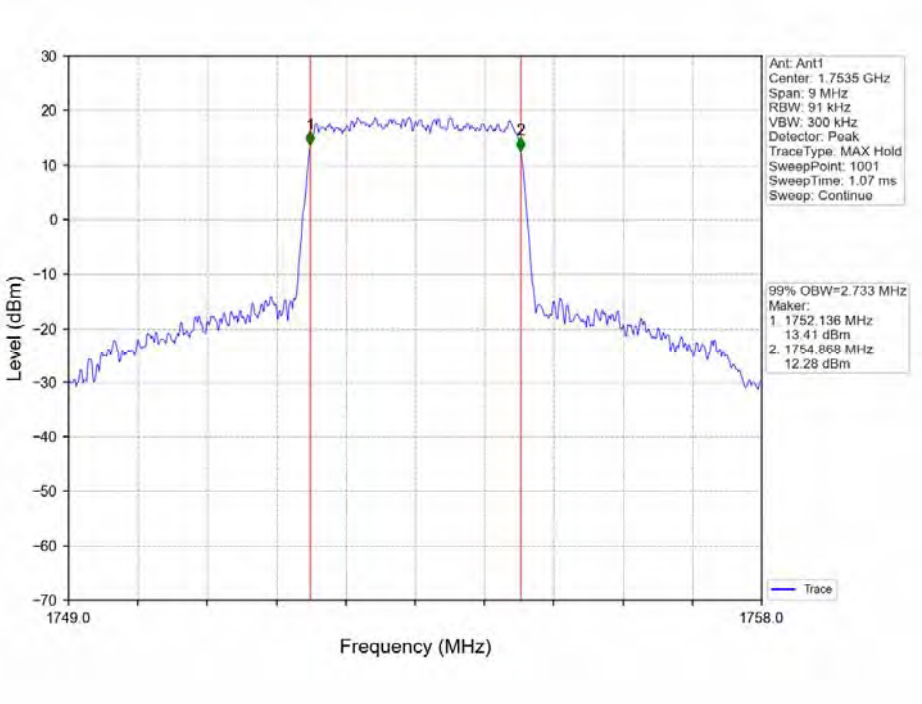
Band4_3MHz_QPSK_LCH_1711.5MHz_RB_15_0_NTNV



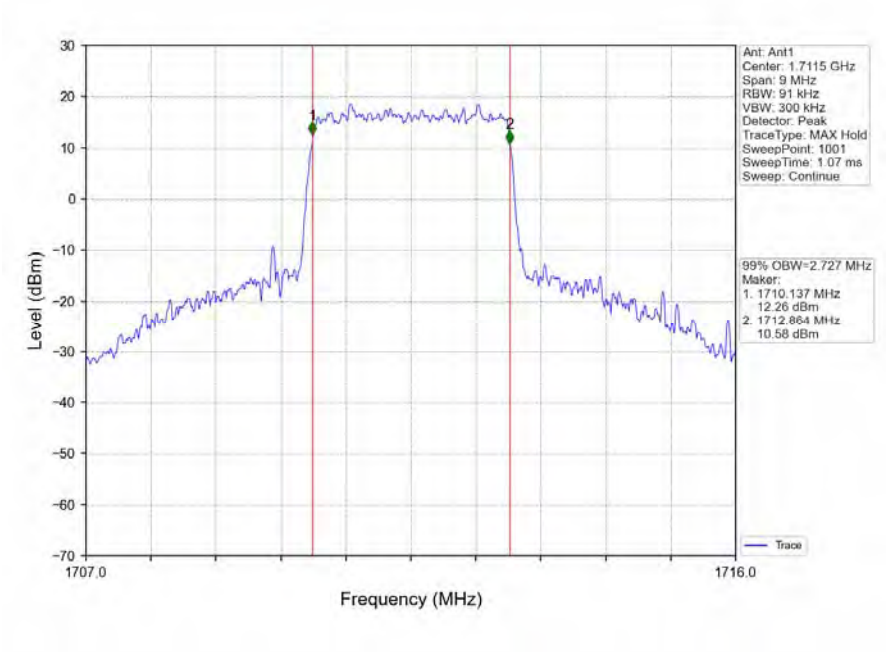
Band4_3MHz_QPSK_MCH_1732.5MHz_RB_15_0_NTNV



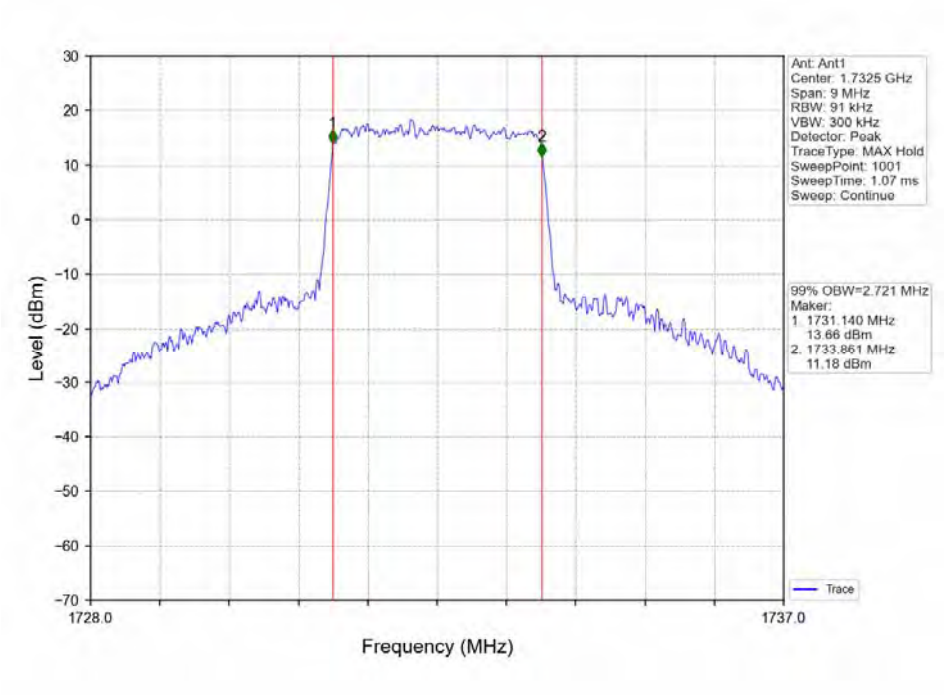
Band4_3MHz_QPSK_HCH_1753.5MHz_RB_15_0_NTNV

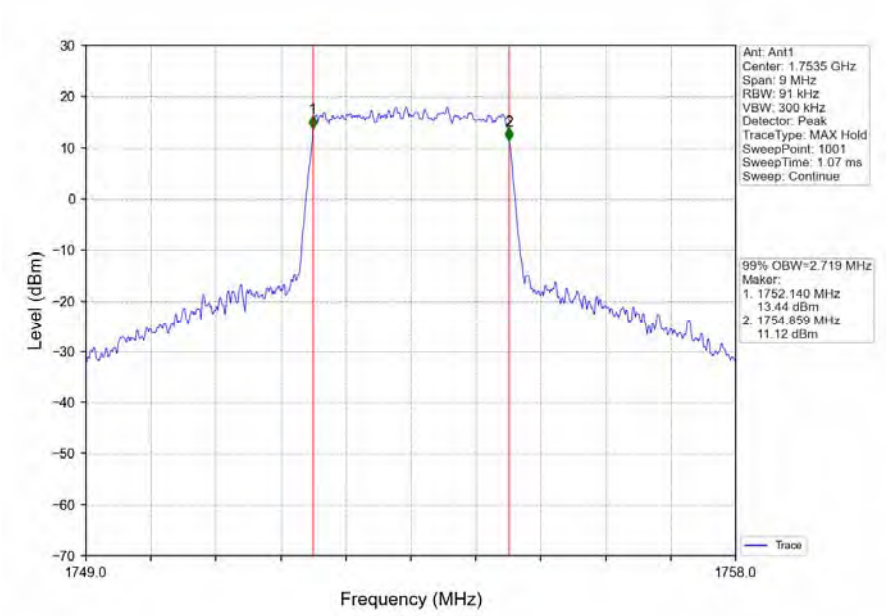
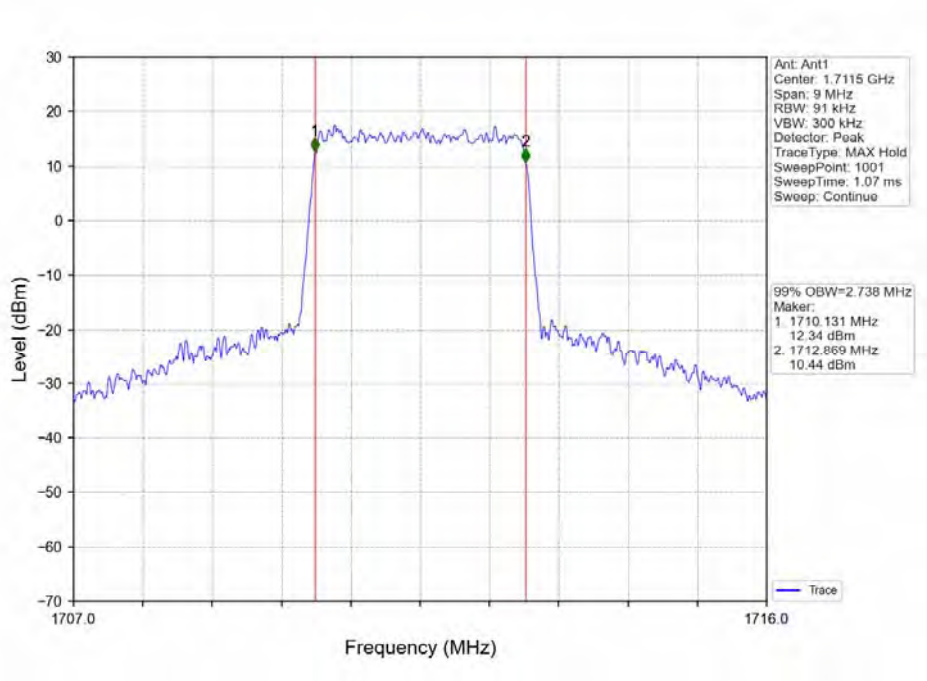


Band4_3MHz_16QAM_LCH_1711.5MHz_RB_15_0_NTNV

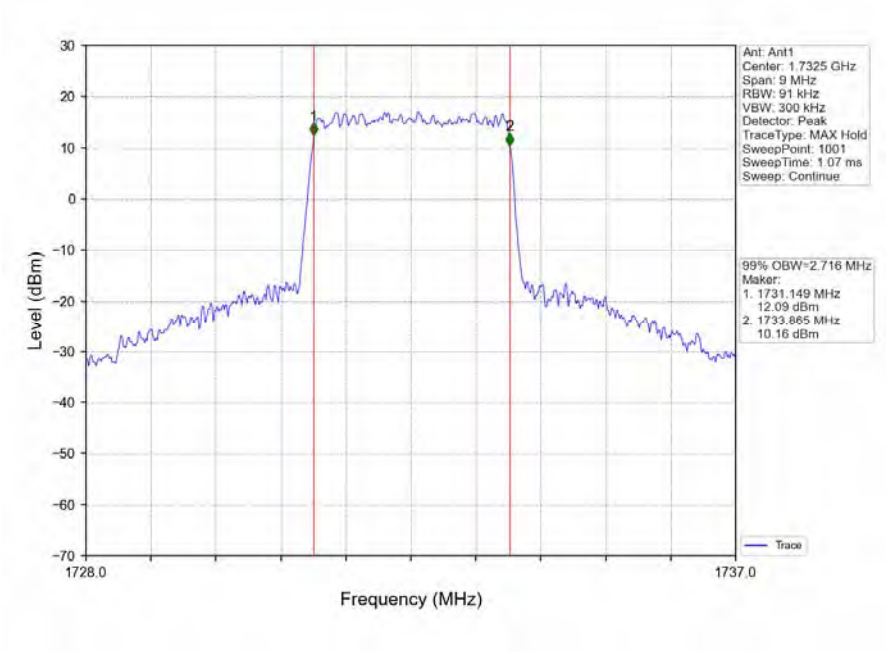


Band4_3MHz_16QAM_MCH_1732.5MHz_RB_15_0_NTNV

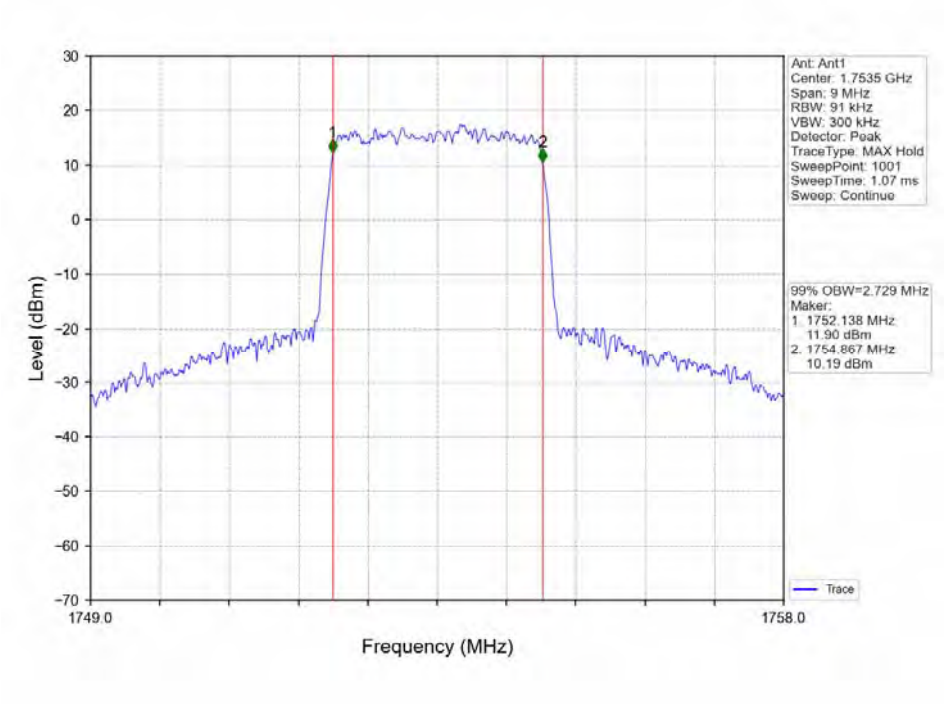


Band4_3MHz_16QAM_HCH_1753.5MHz_RB_15_0_NTNV
 9
Band4_3MHz_64QAM_LCH_1711.5MHz_RB_15_0_NTNV


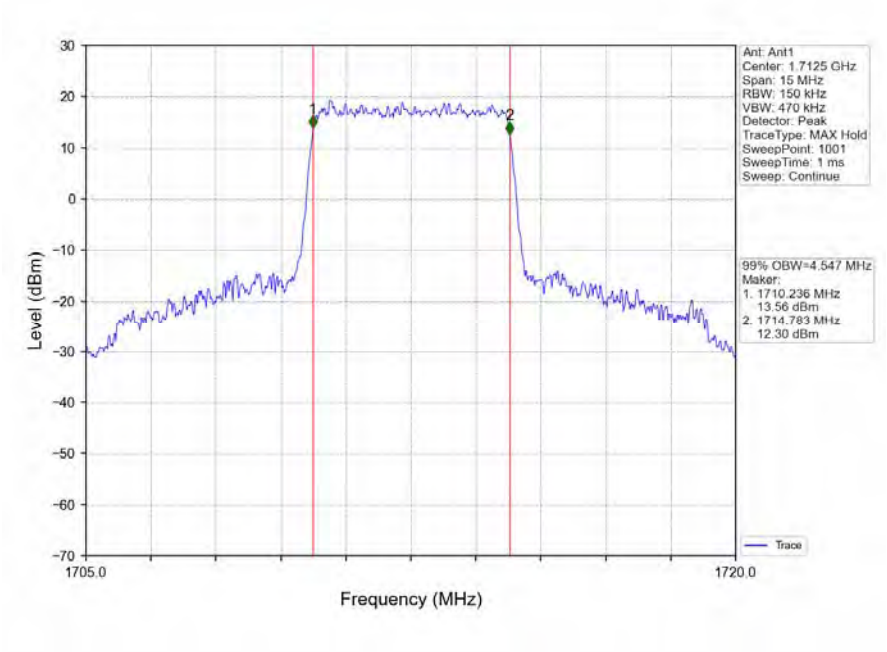
Band4_3MHz_64QAM_MCH_1732.5MHz_RB_15_0_NTNV



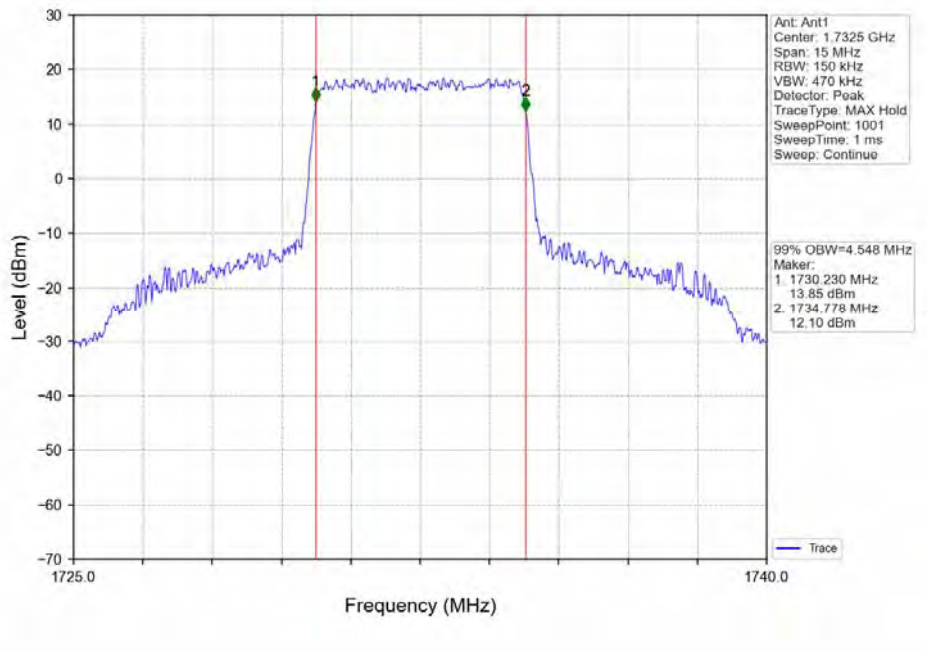
Band4_3MHz_64QAM_HCH_1753.5MHz_RB_15_0_NTNV



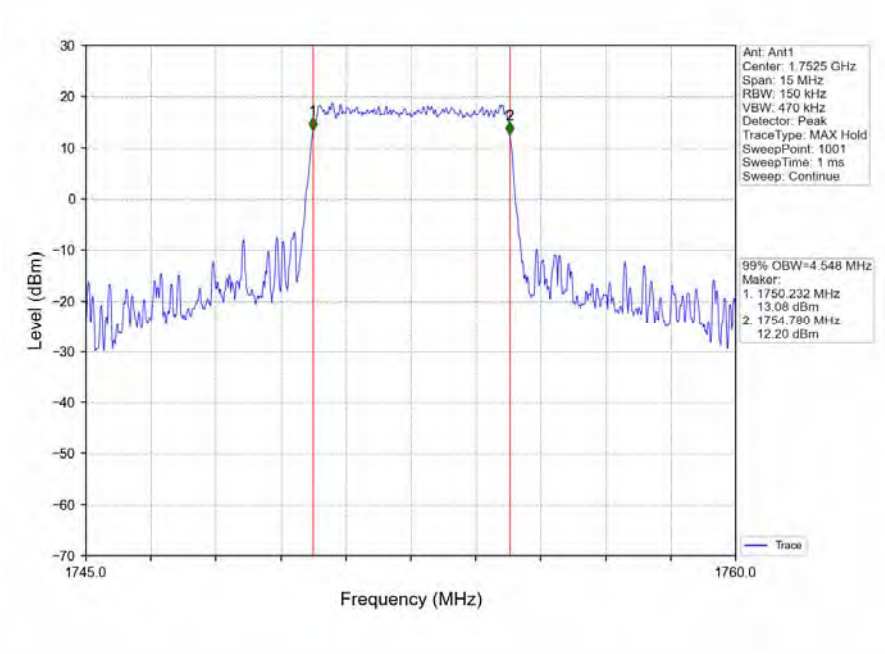
Band4_5MHz_QPSK_LCH_1712.5MHz_RB_25_0_NTNV



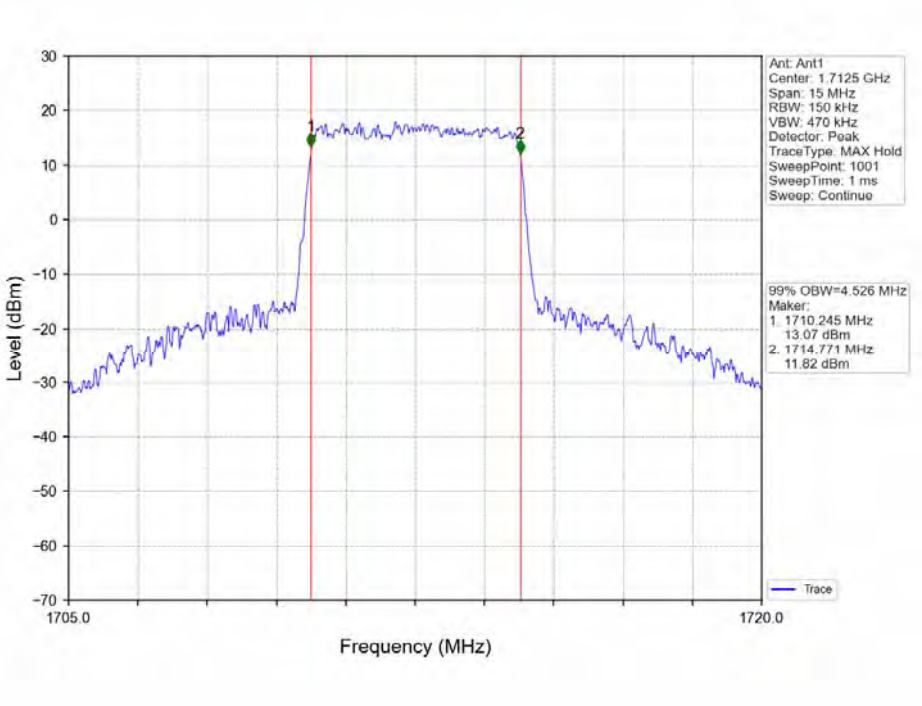
Band4_5MHz_QPSK_MCH_1732.5MHz_RB_25_0_NTNV



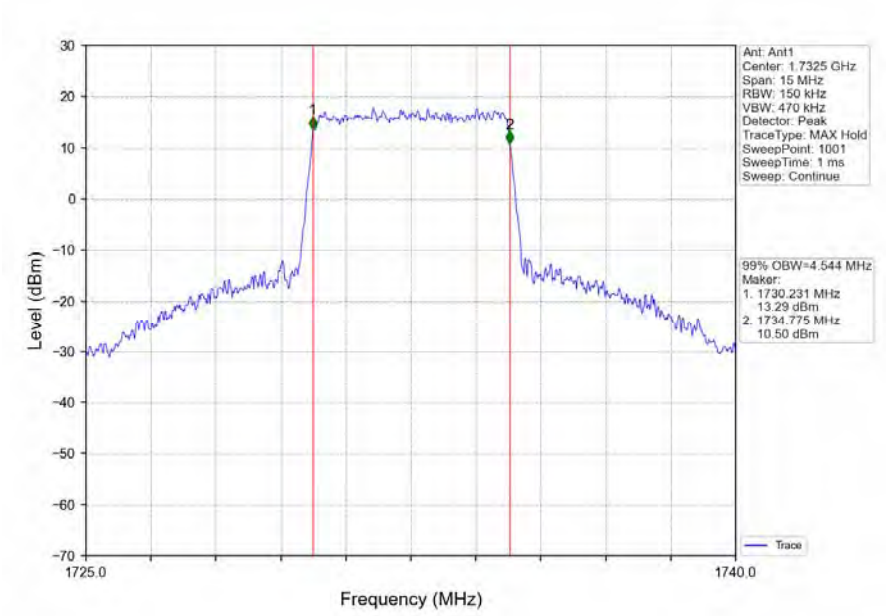
Band4_5MHz_QPSK_HCH_1752.5MHz_RB_25_0_NTNV



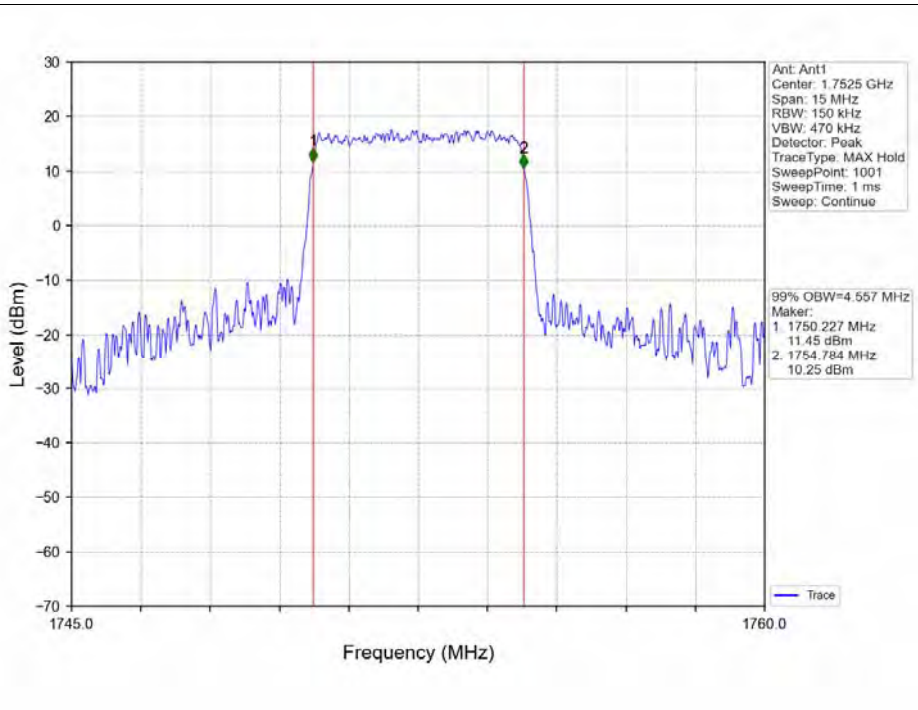
Band4_5MHz_16QAM_LCH_1712.5MHz_RB_25_0_NTNV

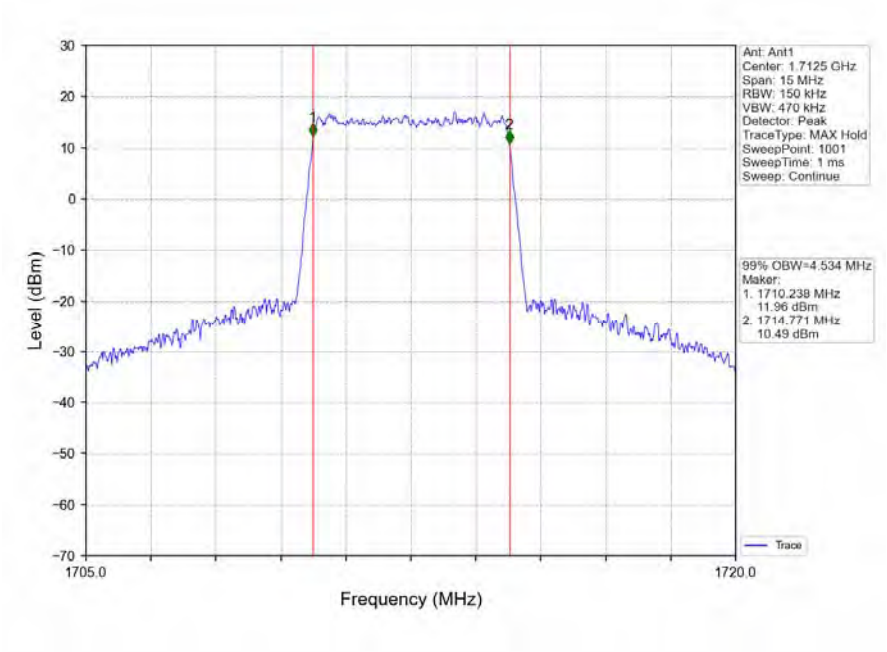
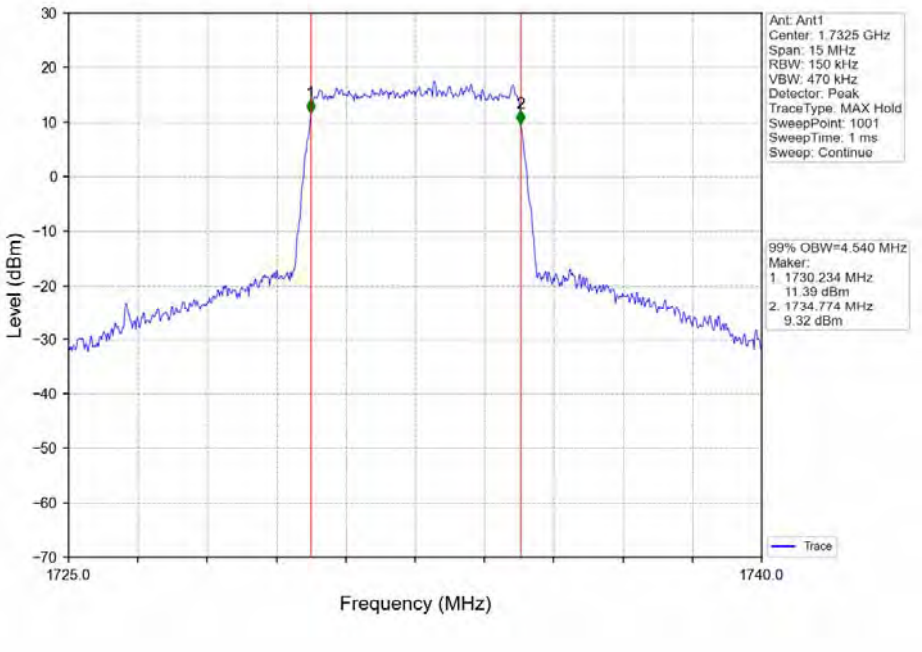


Band4_5MHz_16QAM_MCH_1732.5MHz_RB_25_0_NTNV



Band4_5MHz_16QAM_HCH_1752.5MHz_RB_25_0_NTNV



Band4_5MHz_64QAM_LCH_1712.5MHz_RB_25_0_NTNV

Band4_5MHz_64QAM_MCH_1732.5MHz_RB_25_0_NTNV


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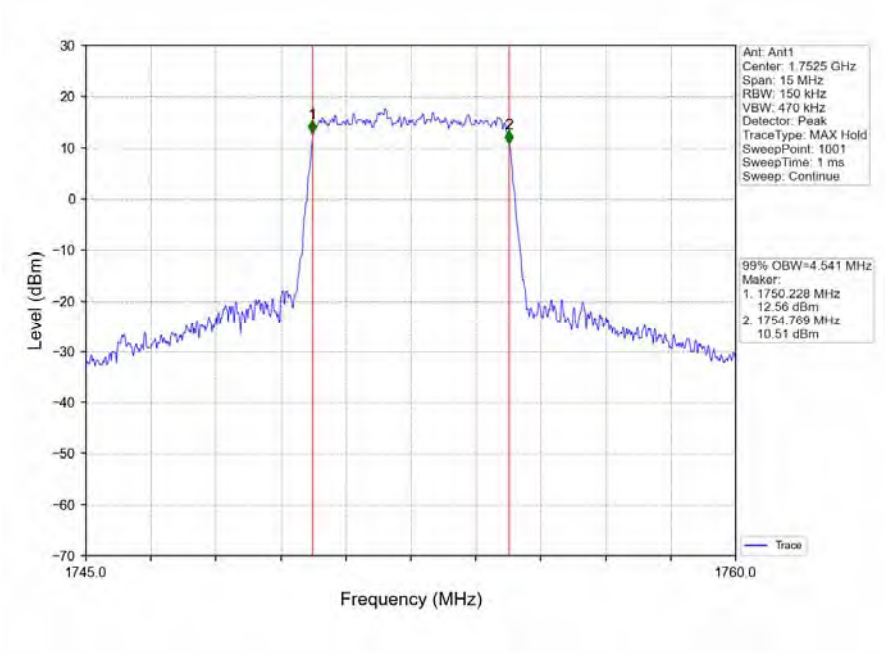
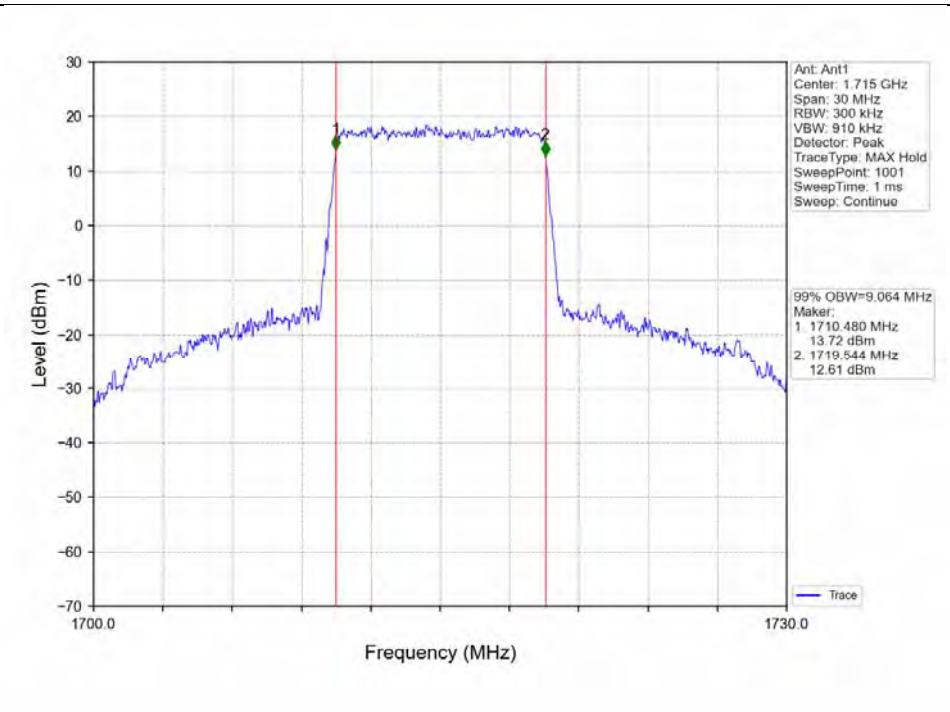

Band4_10MHz_QPSK_LCH_1715MHz_RB_50_0_NTNV


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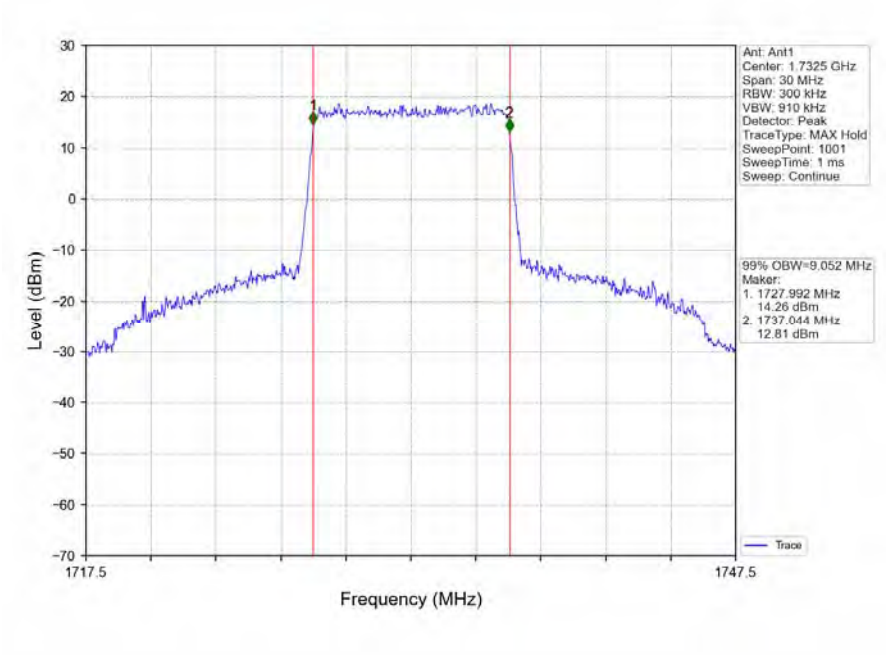
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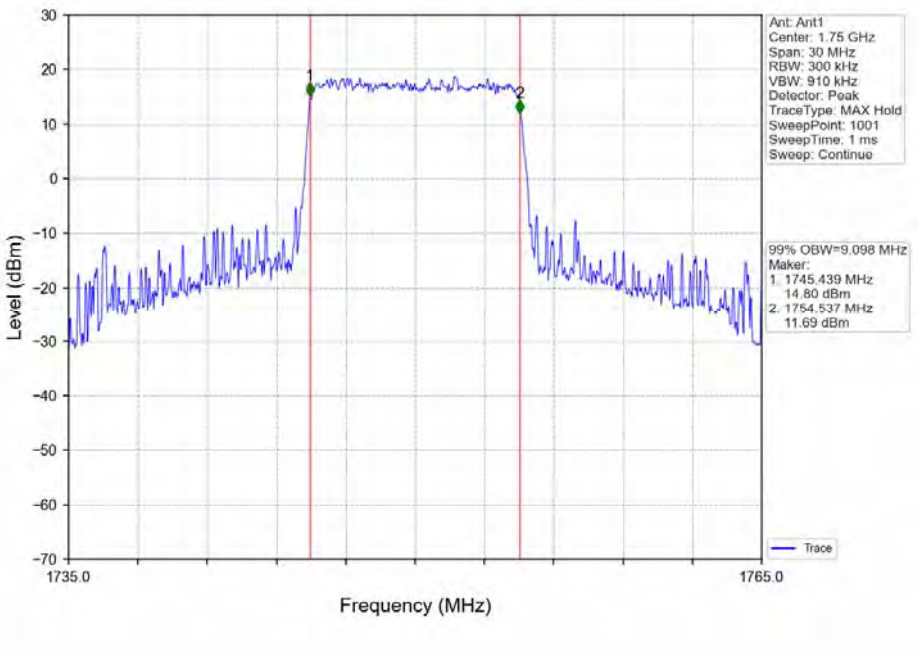
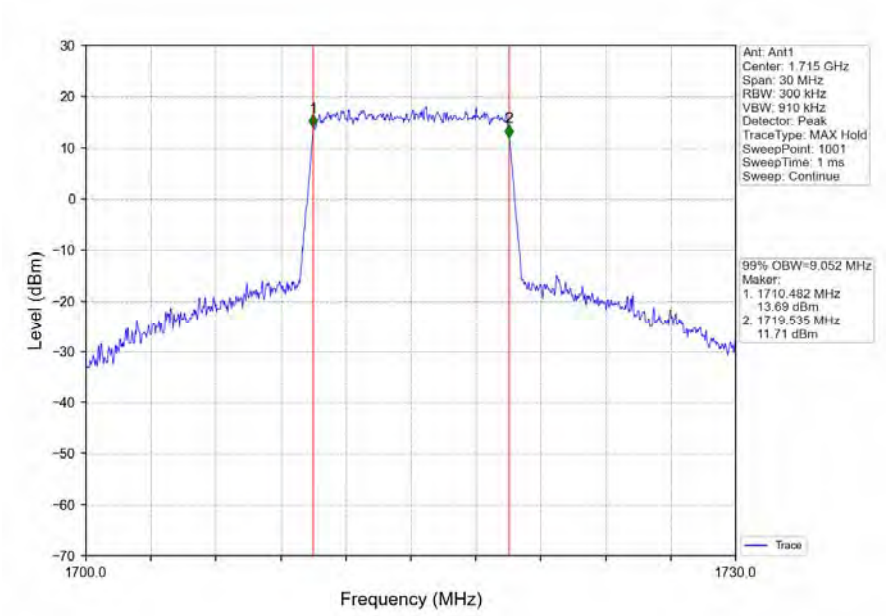
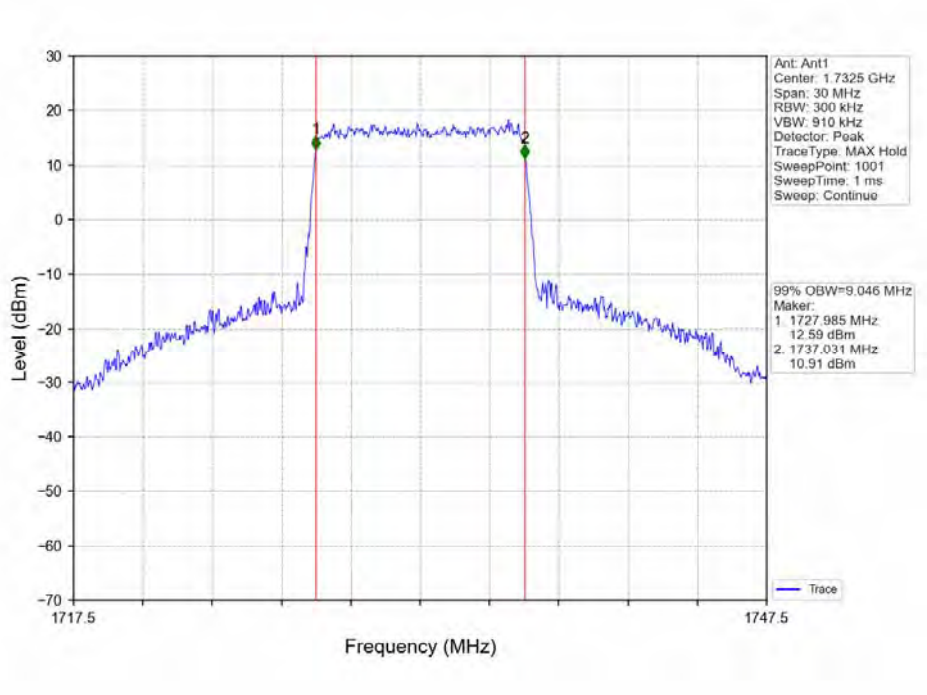
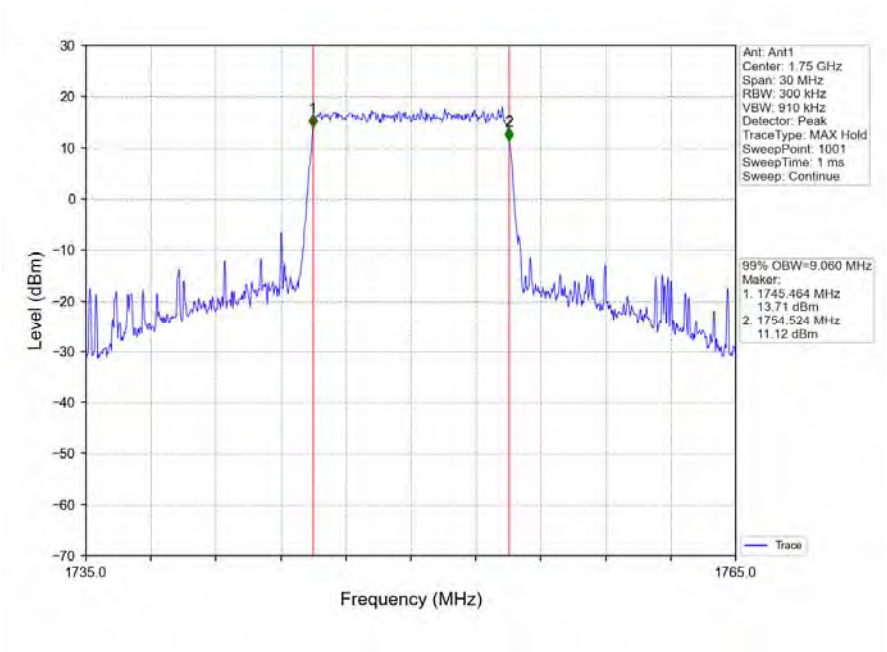
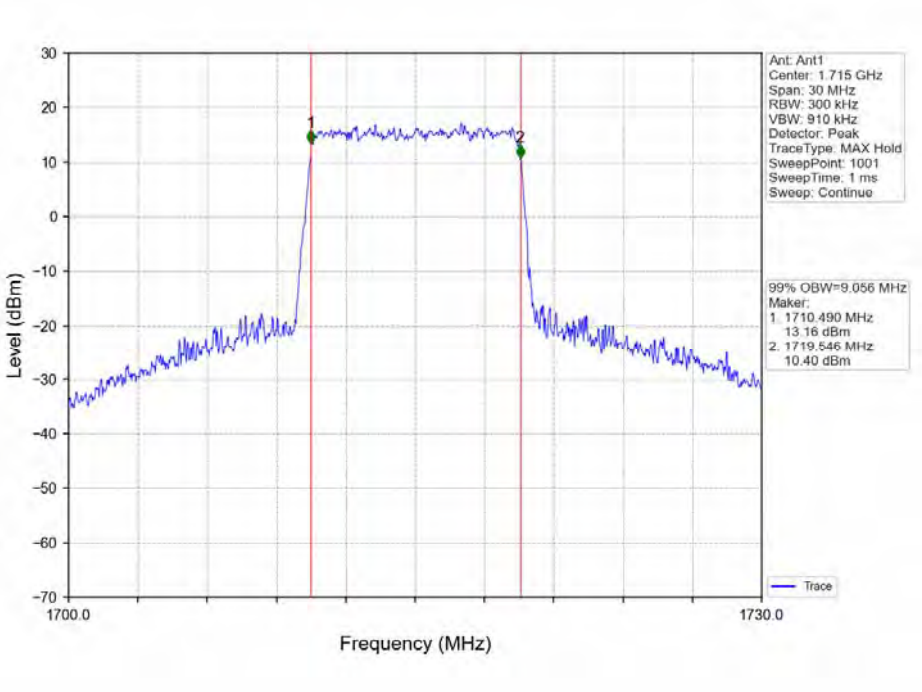


Band4_10MHz_16QAM_LCH_1715MHz_RB_50_0_NTNV

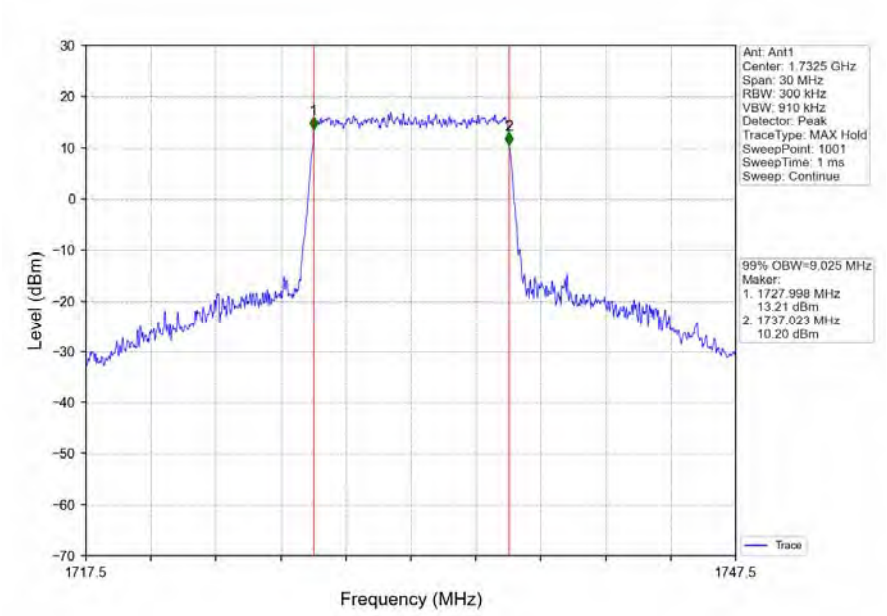


Band4_10MHz_16QAM_MCH_1732.5MHz_RB_50_0_NTNV

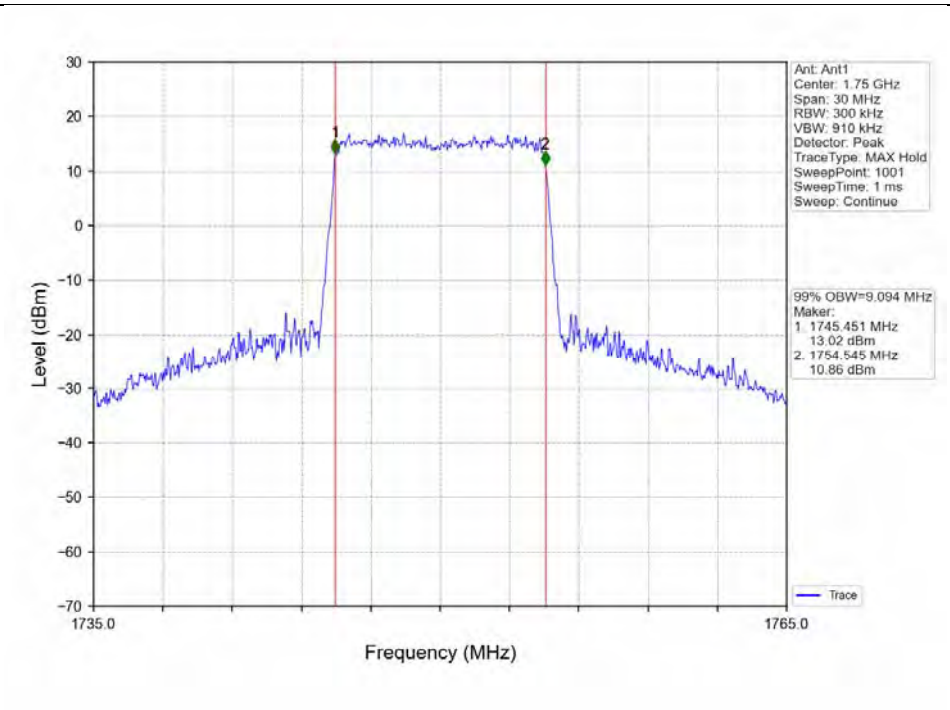


Band4_10MHz_16QAM_HCH_1750MHz_RB_50_0_NTNV

Band4_10MHz_64QAM_LCH_1715MHz_RB_50_0_NTNV


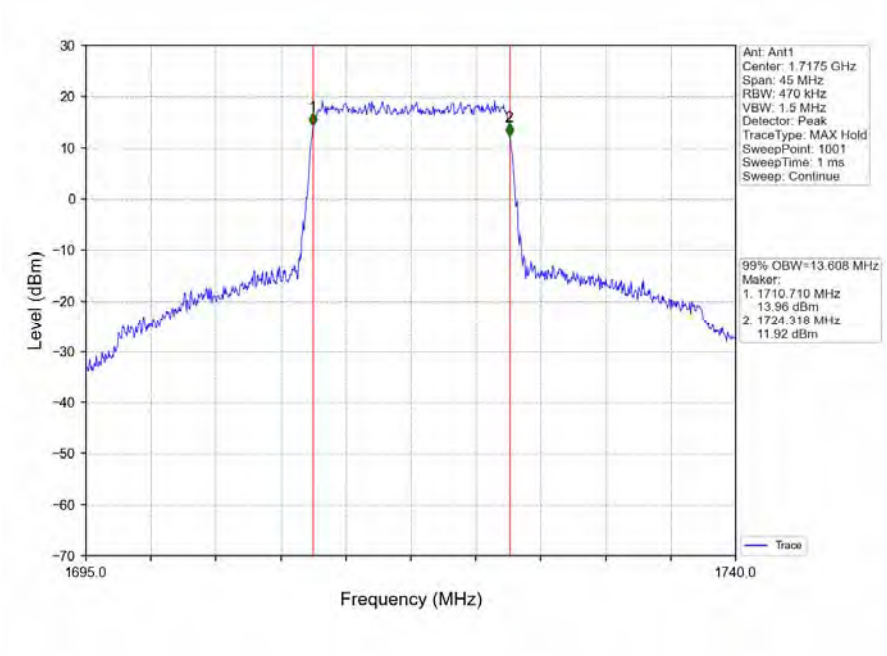
Band4_10MHz_64QAM_MCH_1732.5MHz_RB_50_0_NTNV



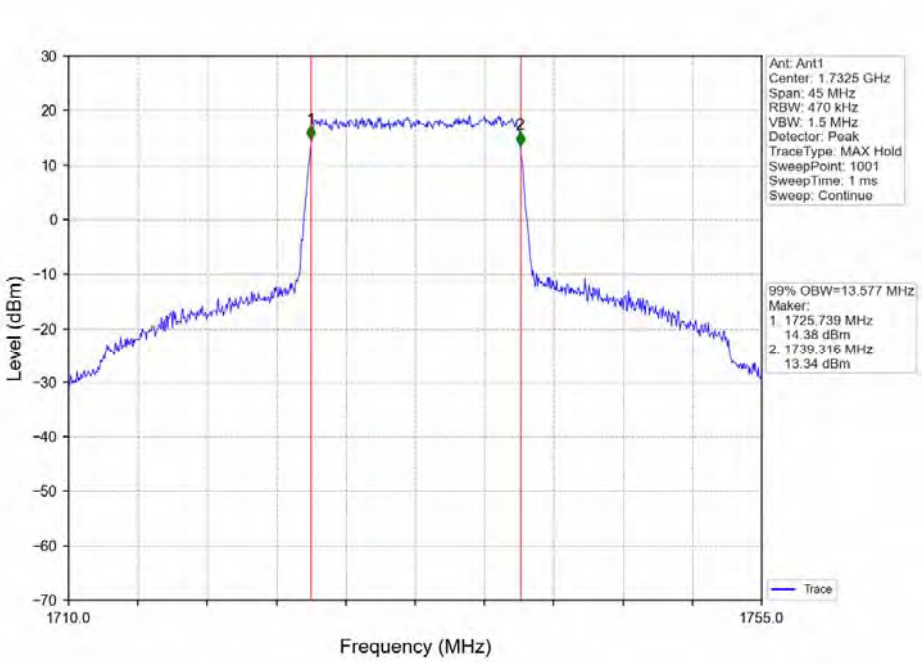
Band4_10MHz_64QAM_HCH_1750MHz_RB_50_0_NTNV



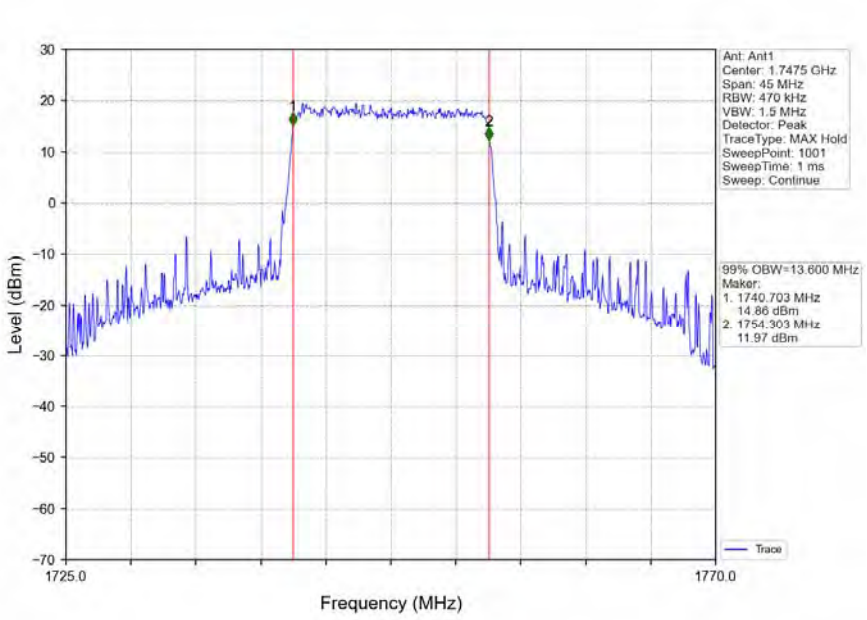
Band4_15MHz_QPSK_LCH_1717.5MHz_RB_75_0_NTNV



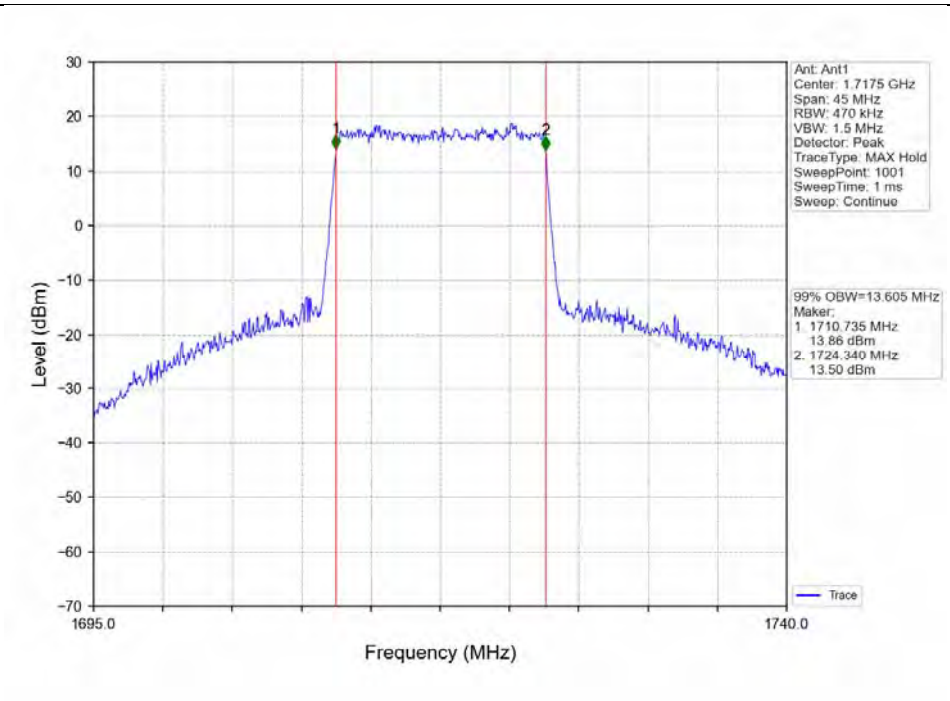
Band4_15MHz_QPSK_MCH_1732.5MHz_RB_75_0_NTNV



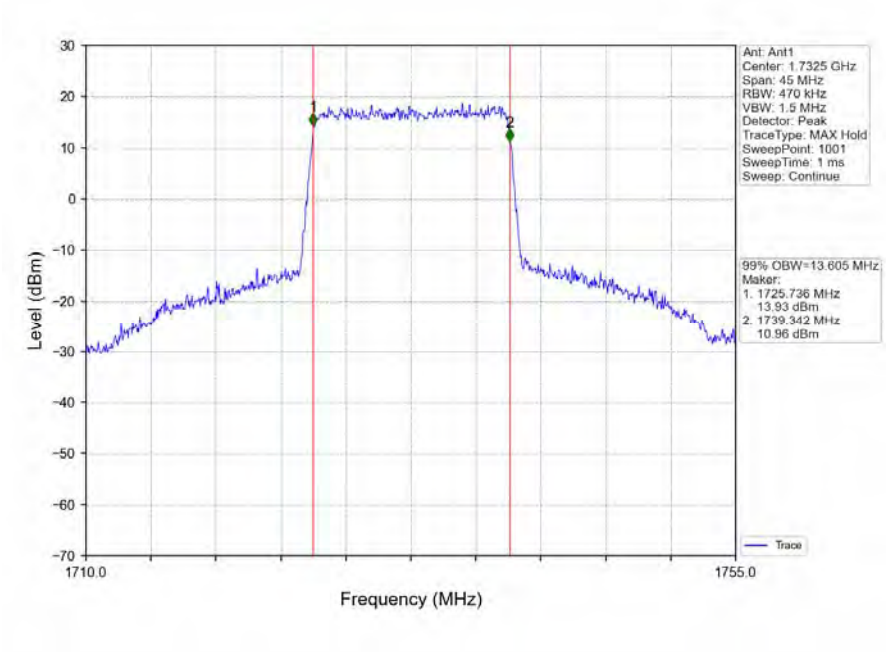
Band4_15MHz_QPSK_HCH_1747.5MHz_RB_75_0_NTNV



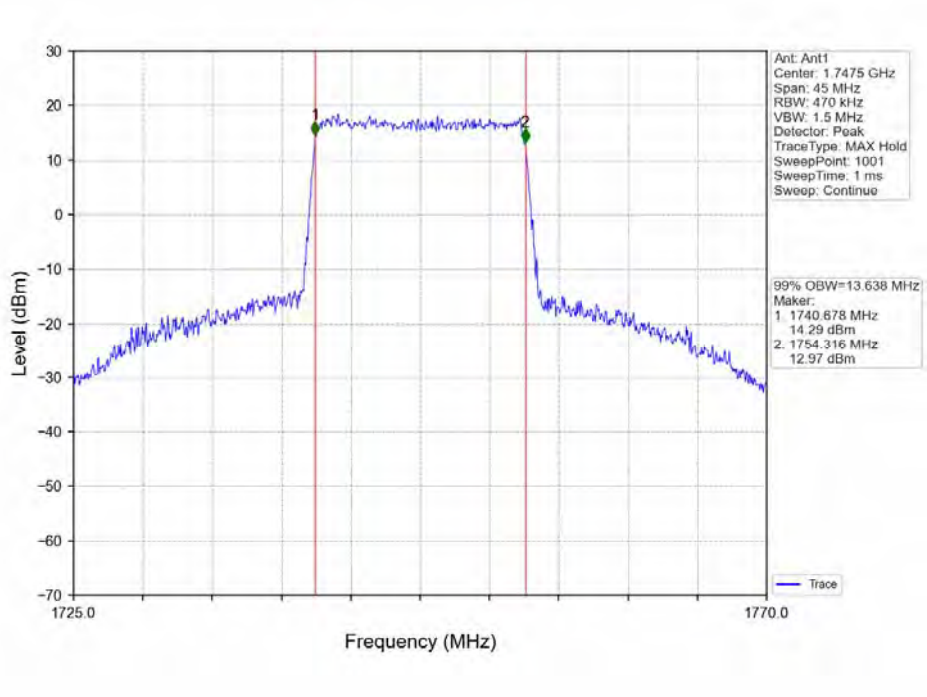
Band4_15MHz_16QAM_LCH_1717.5MHz_RB_75_0_NTNV



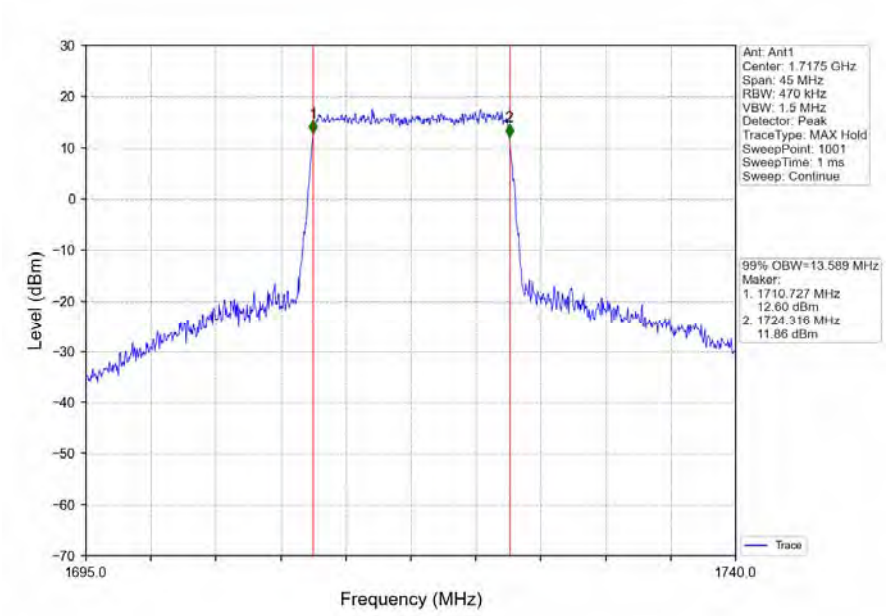
Band4_15MHz_16QAM_MCH_1732.5MHz_RB_75_0_NTNV



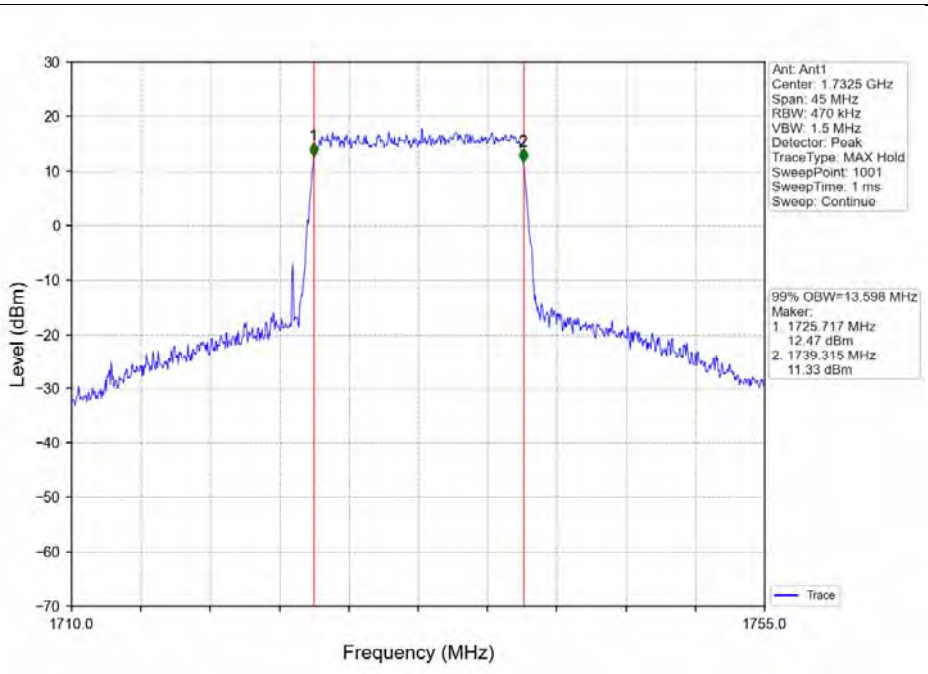
Band4_15MHz_16QAM_HCH_1747.5MHz_RB_75_0_NTNV



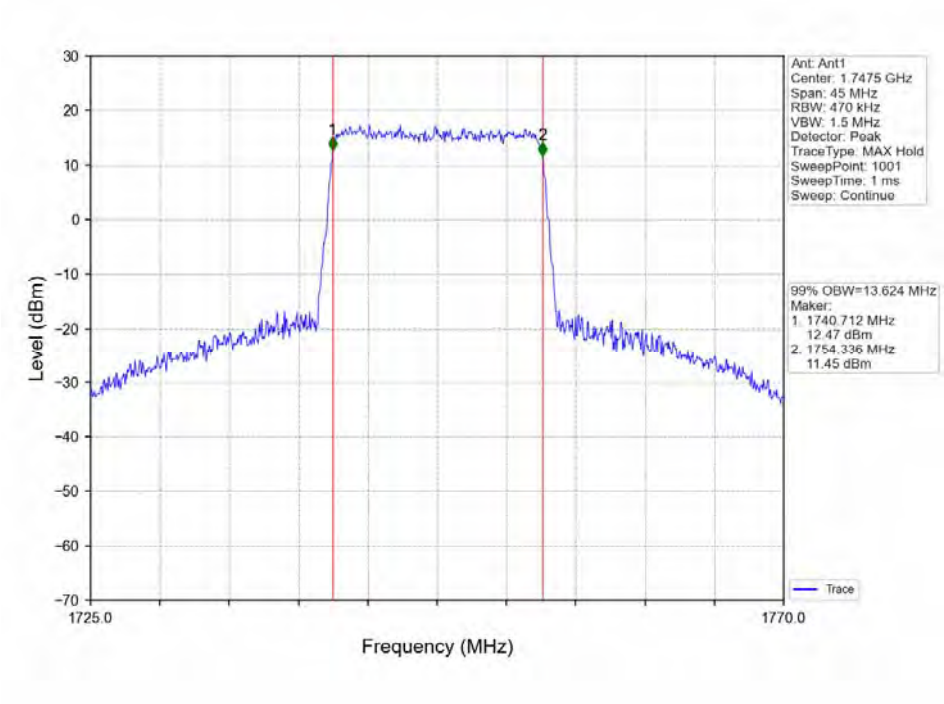
Band4_15MHz_64QAM_LCH_1717.5MHz_RB_75_0_NTNV



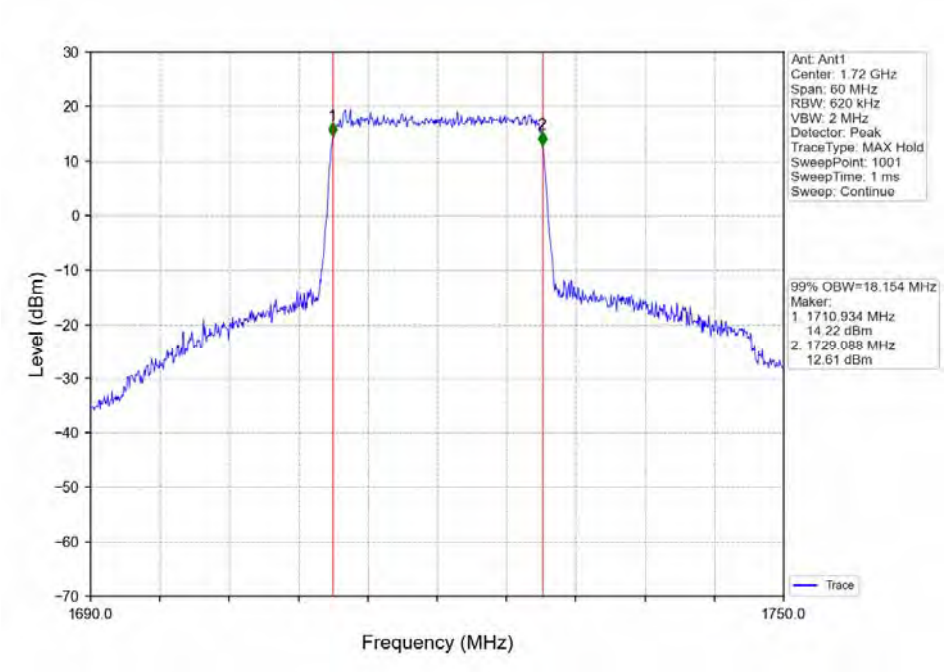
Band4_15MHz_64QAM_MCH_1732.5MHz_RB_75_0_NTNV

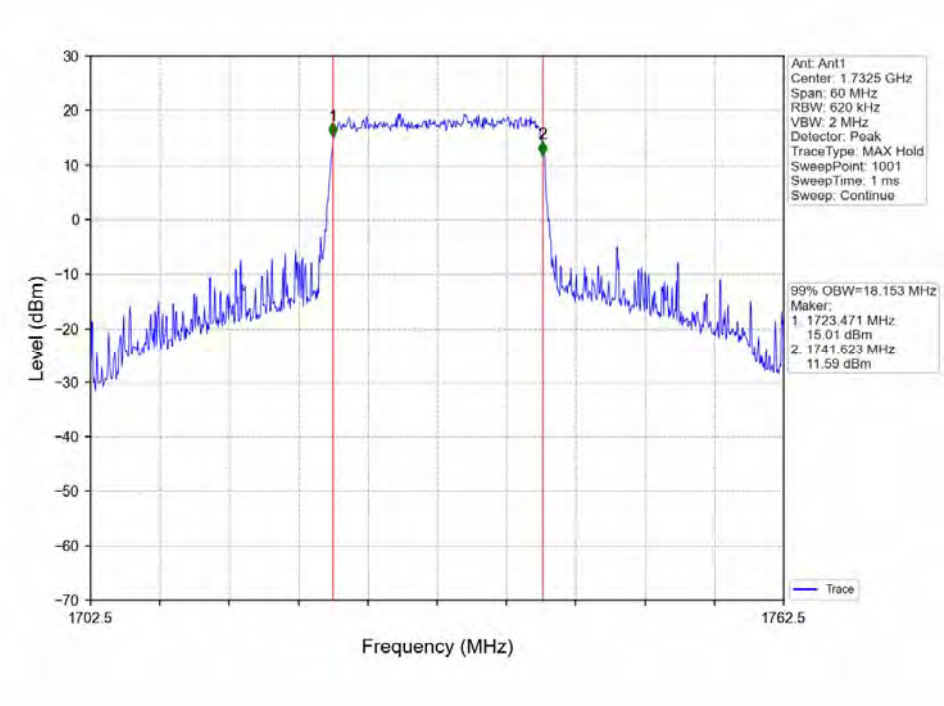
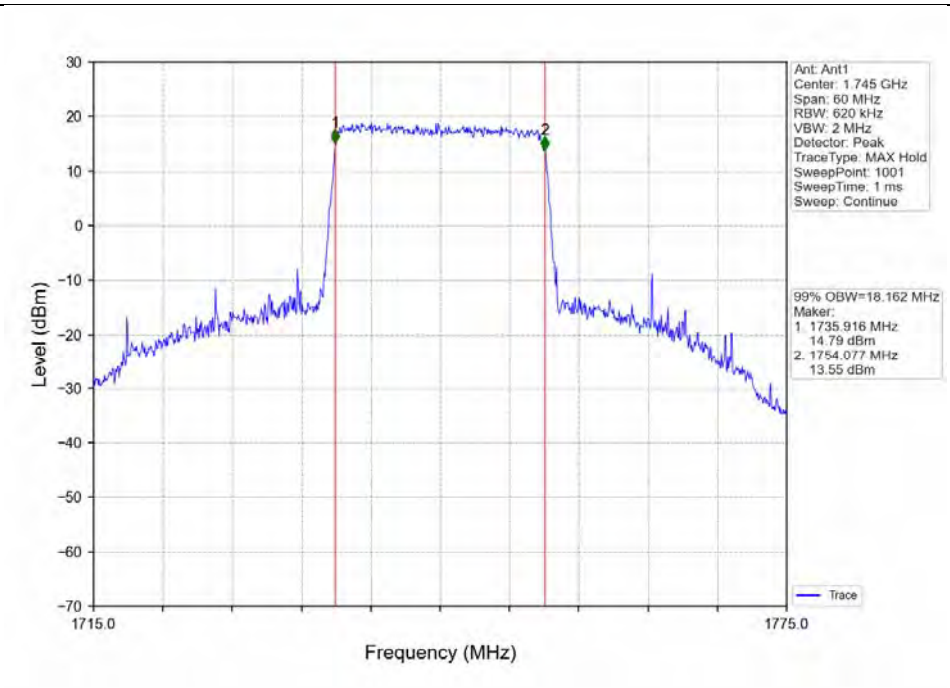


Band4_15MHz_64QAM_HCH_1747.5MHz_RB_75_0_NTNV

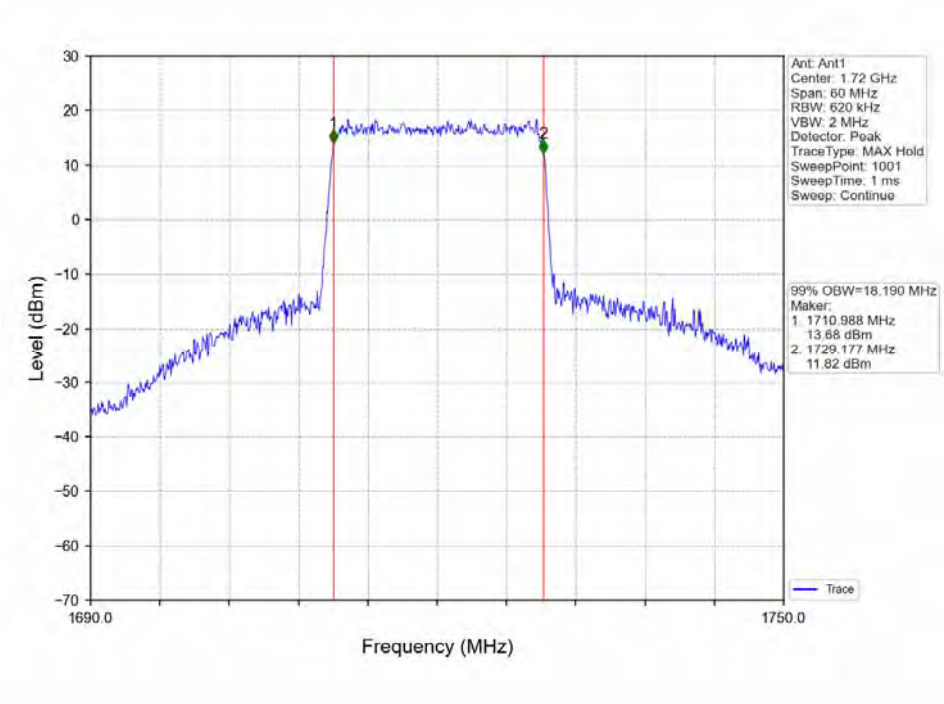


Band4_20MHz_QPSK_LCH_1720MHz_RB_100_0_NTNV

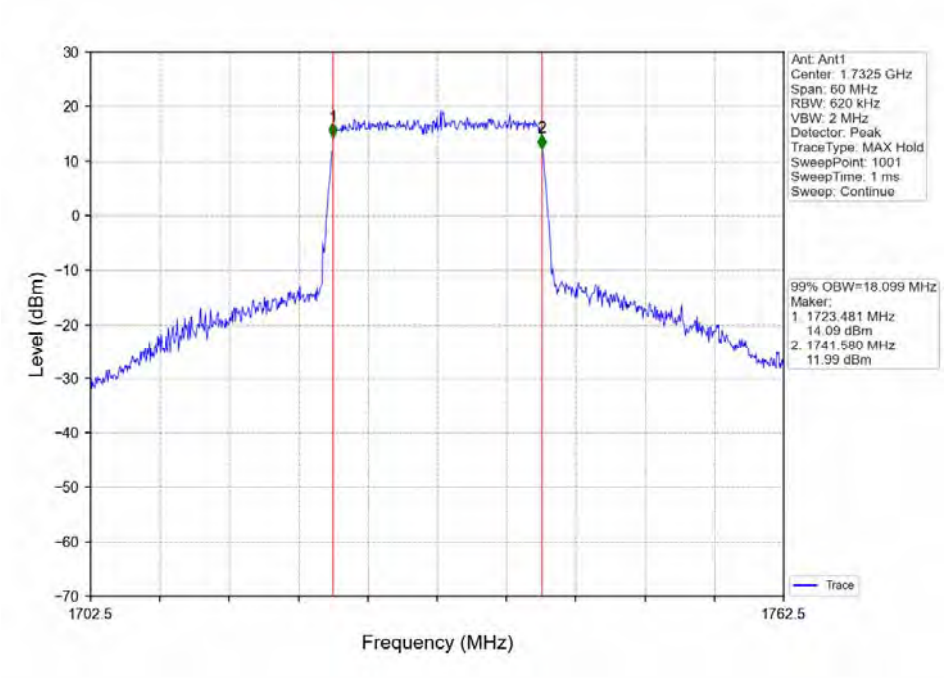


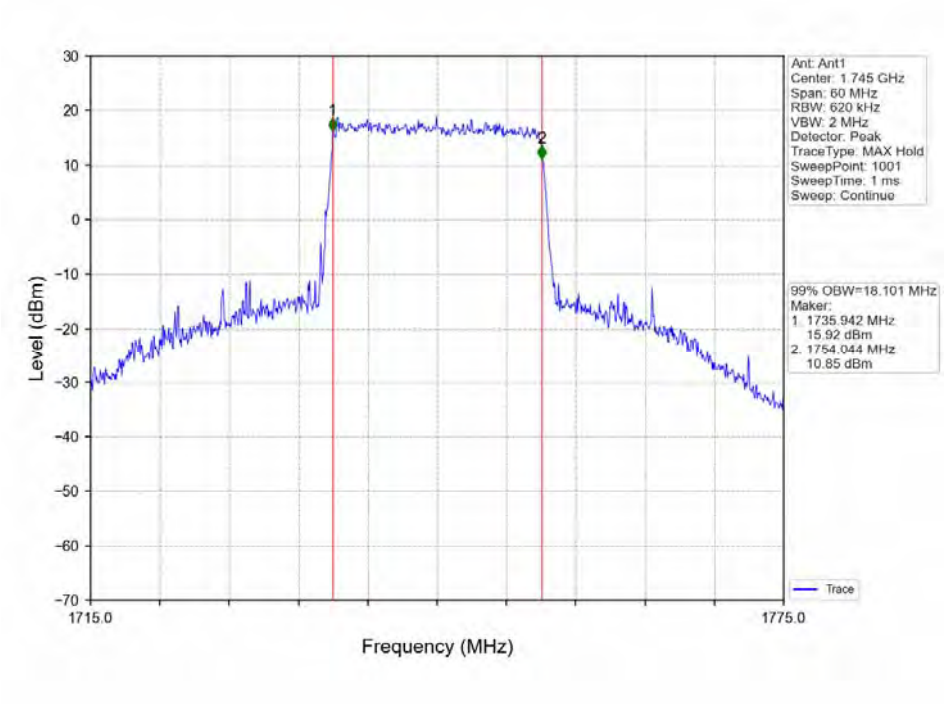
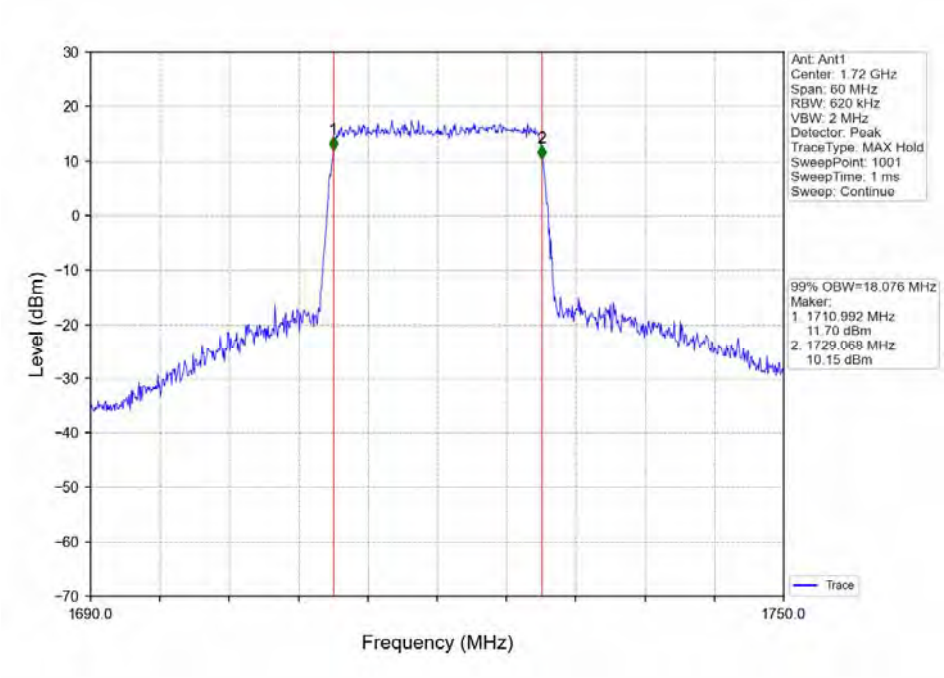
Band4_20MHz_QPSK_MCH_1732.5MHz_RB_100_0_NTNV

Band4_20MHz_QPSK_HCH_1745MHz_RB_100_0_NTNV


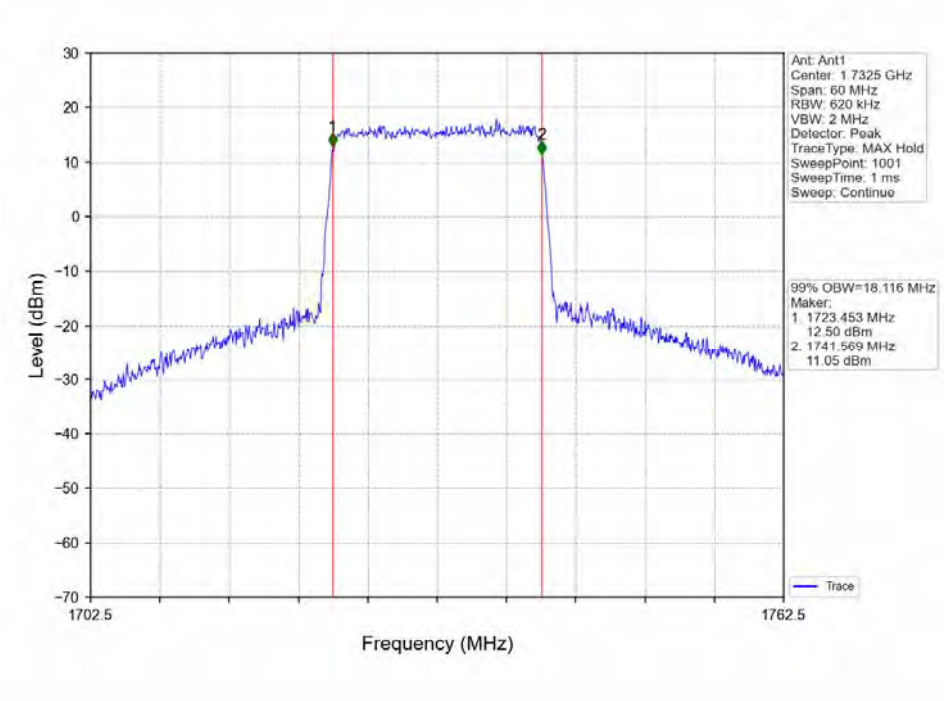
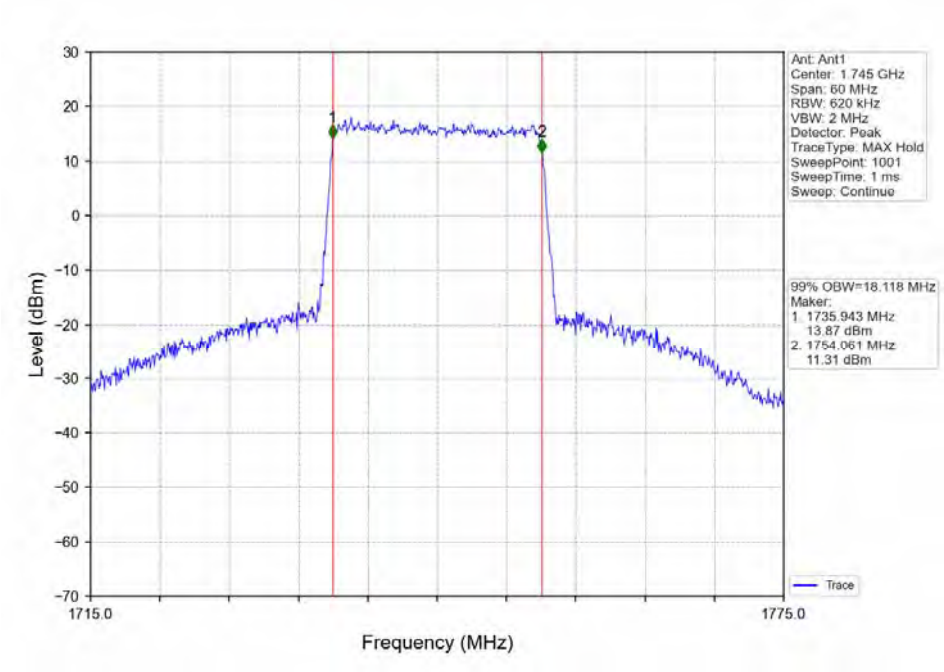
Band4_20MHz_16QAM_LCH_1720MHz_RB_100_0_NTNV



Band4_20MHz_16QAM_MCH_1732.5MHz_RB_100_0_NTNV



Band4_20MHz_16QAM_HCH_1745MHz_RB_100_0_NTNV

Band4_20MHz_64QAM_LCH_1720MHz_RB_100_0_NTNV


Band4_20MHz_64QAM_MCH_1732.5MHz_RB_100_0_NTNV

Band4_20MHz_64QAM_HCH_1745MHz_RB_100_0_NTNV


26DB_BW

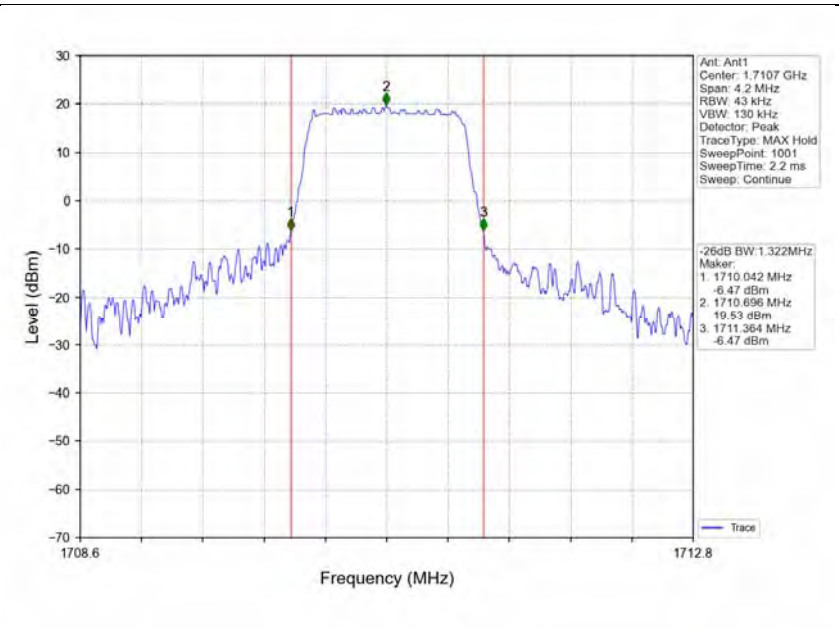
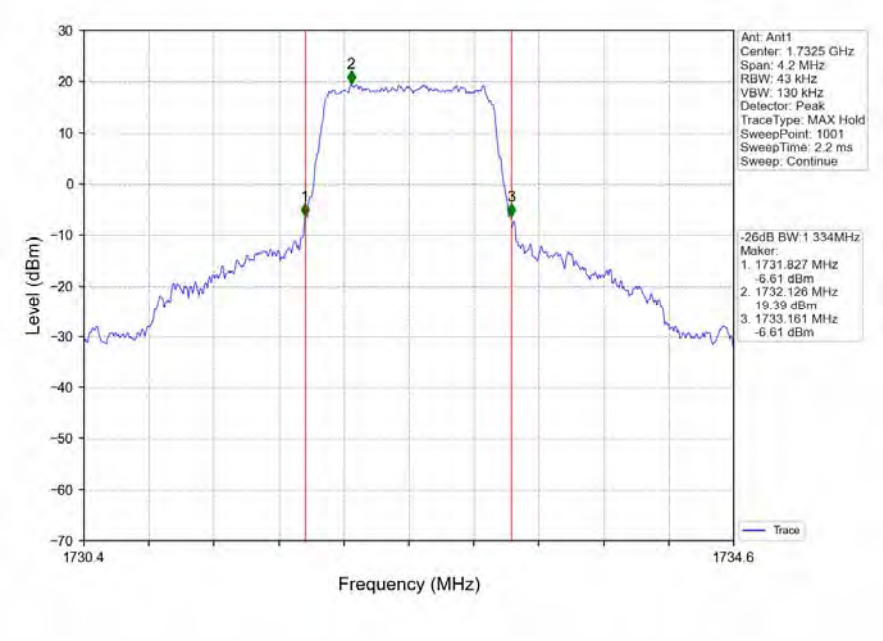
Test Result

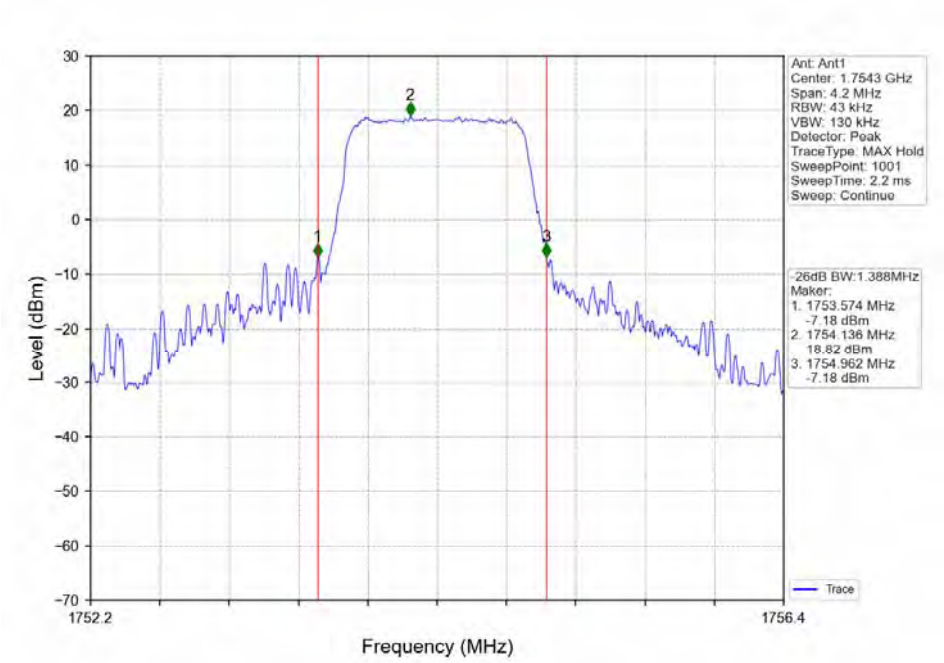
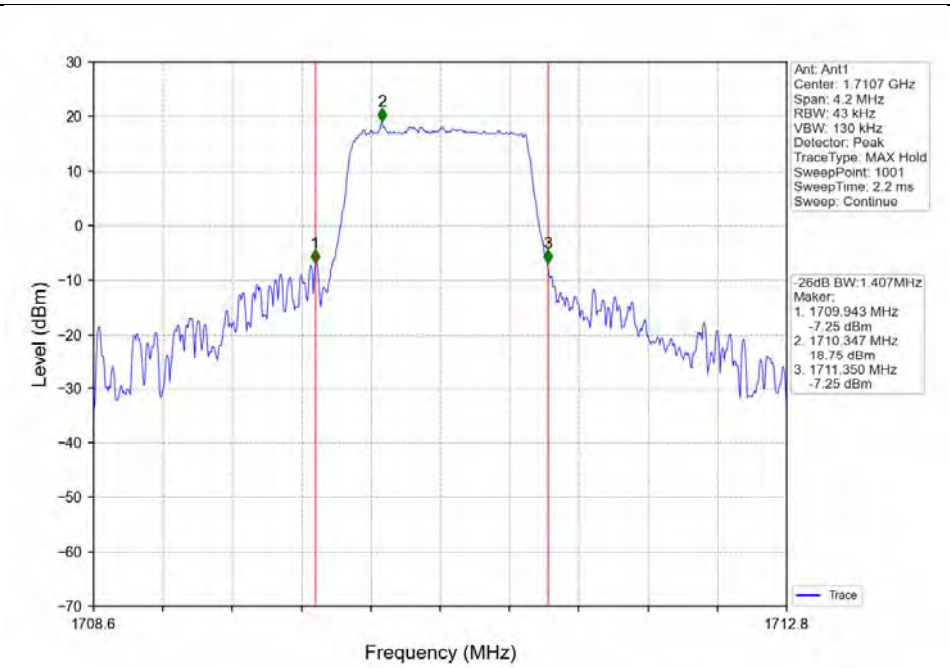
Band: 4 / NTNV						
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)	Verdict
			Size	Offset	Result	
1.4	QPSK	1710.7	6	0	1.322	Pass
		1732.5	6	0	1.334	Pass
		1754.3	6	0	1.388	Pass
	16QAM	1710.7	6	0	1.407	Pass
		1732.5	6	0	1.330	Pass
		1754.3	6	0	1.321	Pass
	64QAM	1710.7	6	0	1.344	Pass
		1732.5	6	0	1.300	Pass
		1754.3	6	0	1.315	Pass
3	QPSK	1711.5	15	0	2.997	Pass
		1732.5	15	0	3.007	Pass
		1753.5	15	0	3.003	Pass
	16QAM	1711.5	15	0	2.983	Pass
		1732.5	15	0	2.985	Pass
		1753.5	15	0	3.008	Pass
	64QAM	1711.5	15	0	2.984	Pass
		1732.5	15	0	2.982	Pass
		1753.5	15	0	2.991	Pass
5	QPSK	1712.5	25	0	5.020	Pass

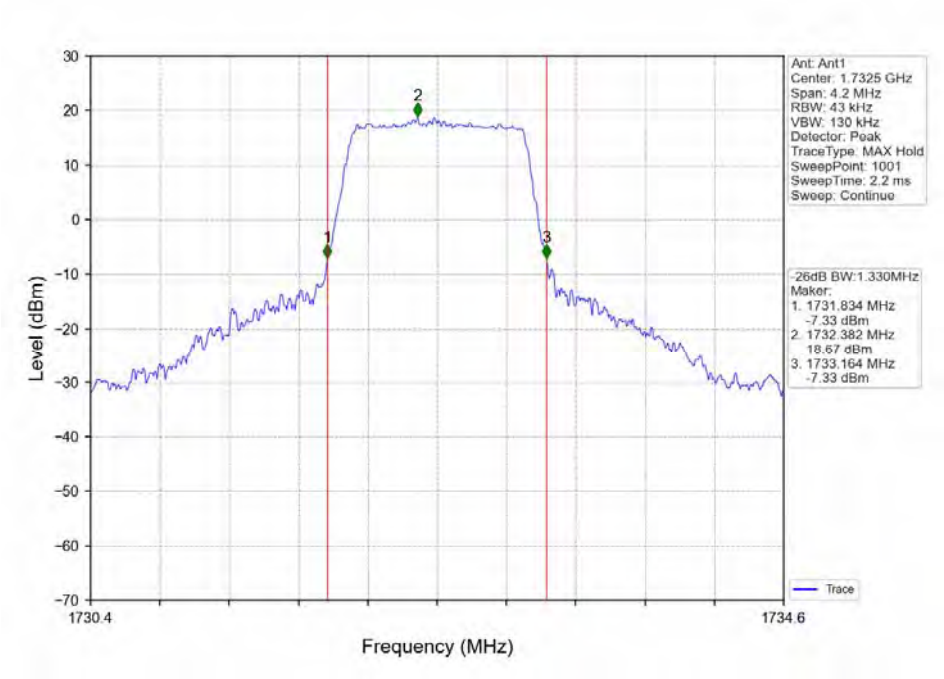
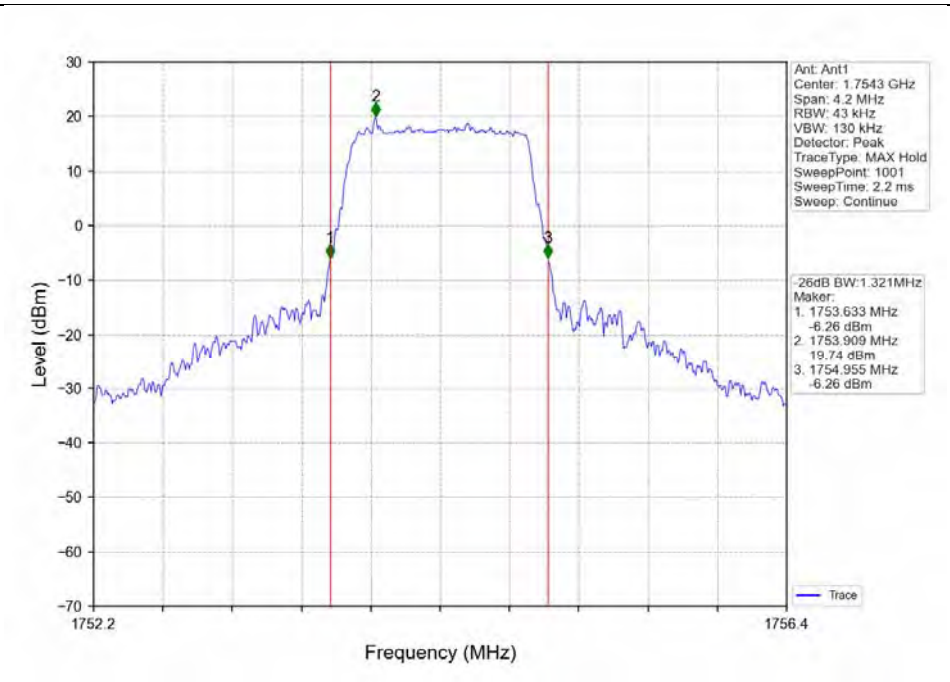
		1732.5	25	0	5.028	Pass
		1752.5	25	0	5.202	Pass
	16QAM	1712.5	25	0	5.004	Pass
		1732.5	25	0	5.043	Pass
		1752.5	25	0	5.041	Pass
	64QAM	1712.5	25	0	5.023	Pass
		1732.5	25	0	5.044	Pass
		1752.5	25	0	5.001	Pass
10	QPSK	1715	50	0	10.004	Pass
		1732.5	50	0	9.991	Pass
		1750	50	0	10.488	Pass
	16QAM	1715	50	0	9.926	Pass
		1732.5	50	0	9.922	Pass
		1750	50	0	11.027	Pass
	64QAM	1715	50	0	9.861	Pass
		1732.5	50	0	9.896	Pass
		1750	50	0	9.908	Pass
15	QPSK	1717.5	75	0	14.963	Pass
		1732.5	75	0	14.898	Pass
		1747.5	75	0	16.890	Pass
	16QAM	1717.5	75	0	14.915	Pass
		1732.5	75	0	14.945	Pass
		1747.5	75	0	14.862	Pass
	64QAM	1717.5	75	0	14.958	Pass

		1732.5	75	0	15.622	Pass
		1747.5	75	0	14.990	Pass
20	QPSK	1720	100	0	19.670	Pass
		1732.5	100	0	28.780	Pass
		1745	100	0	19.828	Pass
	16QAM	1720	100	0	19.656	Pass
		1732.5	100	0	19.763	Pass
		1745	100	0	19.964	Pass
	64QAM	1720	100	0	19.839	Pass
		1732.5	100	0	19.631	Pass
		1745	100	0	19.773	Pass

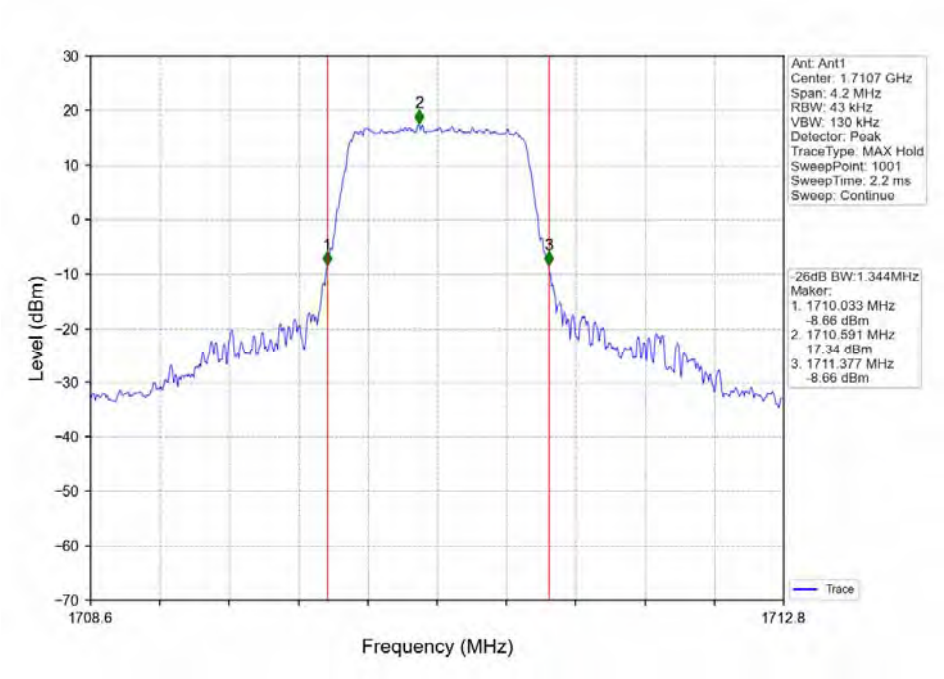
Test Graph

Band4_1.4MHz_QPSK_LCH_1710.7MHz_RB_6_0_NTNV

Band4_1.4MHz_QPSK_MCH_1732.5MHz_RB_6_0_NTNV


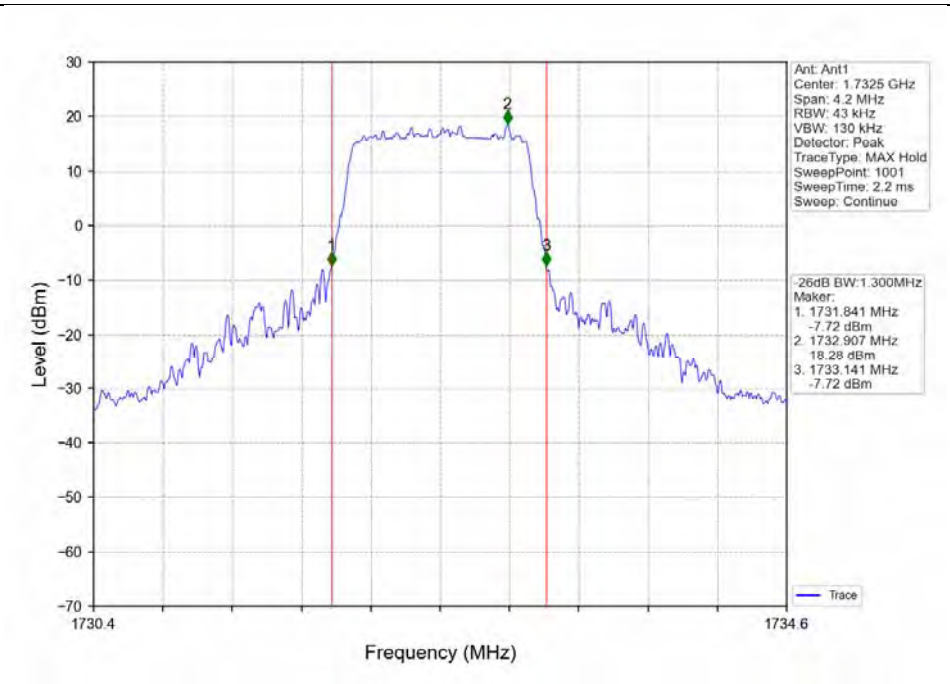
Band4_1.4MHz_QPSK_HCH_1754.3MHz_RB_6_0_NTNV

Band4_1.4MHz_16QAM_LCH_1710.7MHz_RB_6_0_NTNV


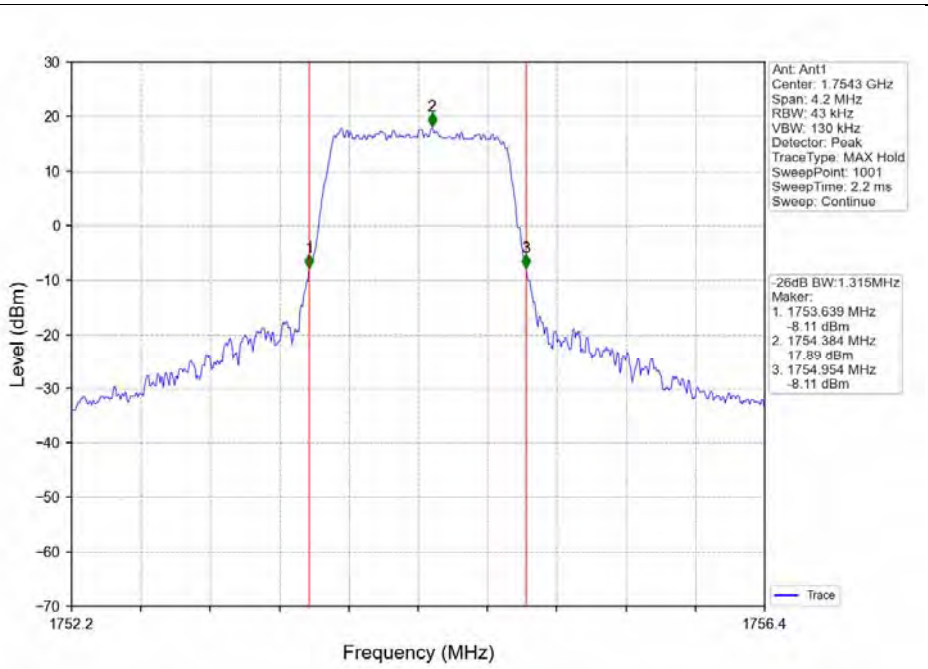
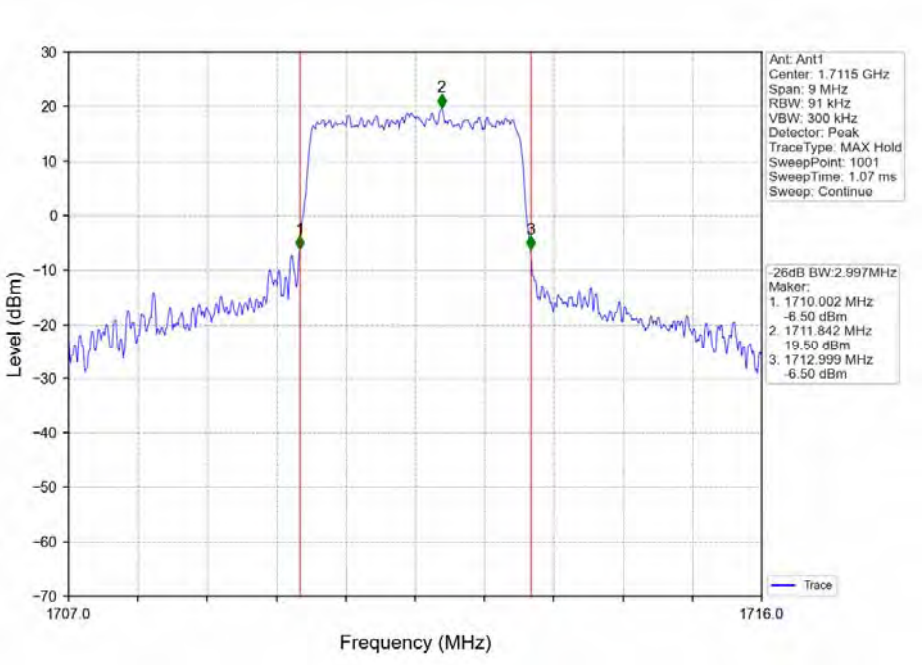
Band4_1.4MHz_16QAM_MCH_1732.5MHz_RB_6_0_NTNV

Band4_1.4MHz_16QAM_HCH_1754.3MHz_RB_6_0_NTNV


Band4_1.4MHz_64QAM_LCH_1710.7MHz_RB_6_0_NTNV

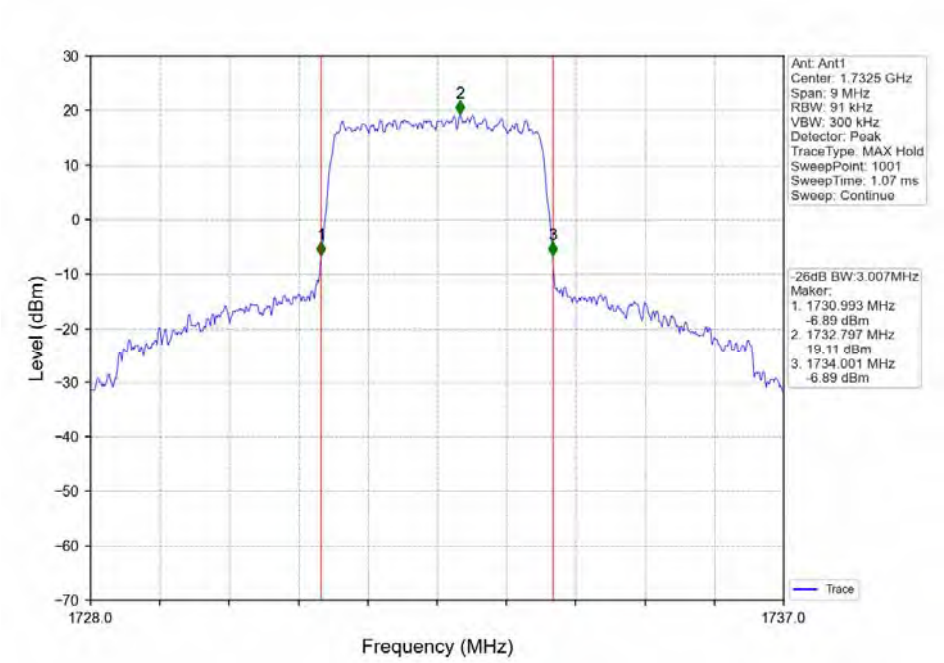


Band4_1.4MHz_64QAM_MCH_1732.5MHz_RB_6_0_NTNV

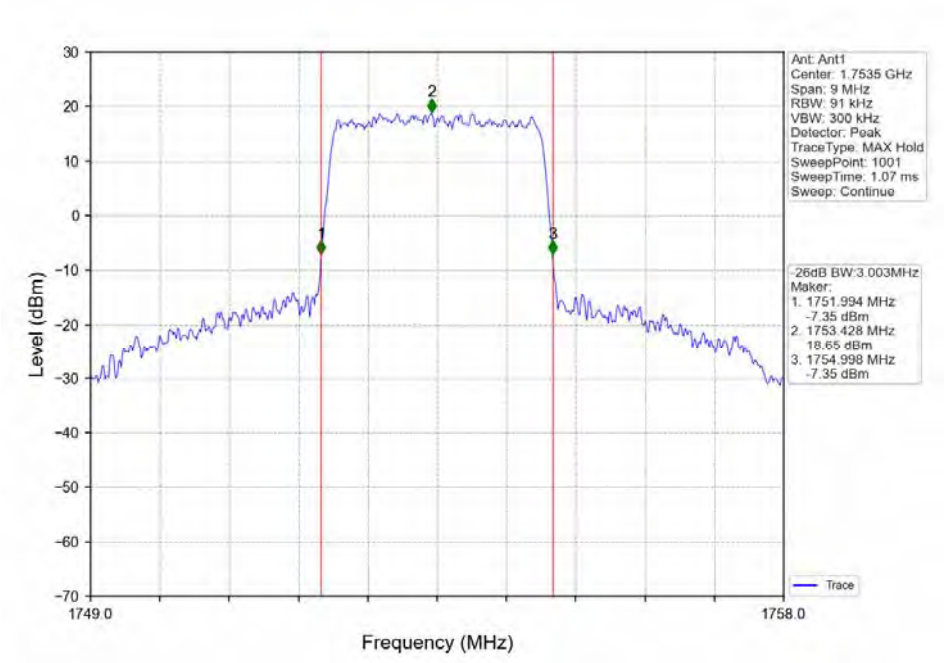


Band4_1.4MHz_64QAM_HCH_1754.3MHz_RB_6_0_NTNV

Band4_3MHz_QPSK_LCH_1711.5MHz_RB_15_0_NTNV


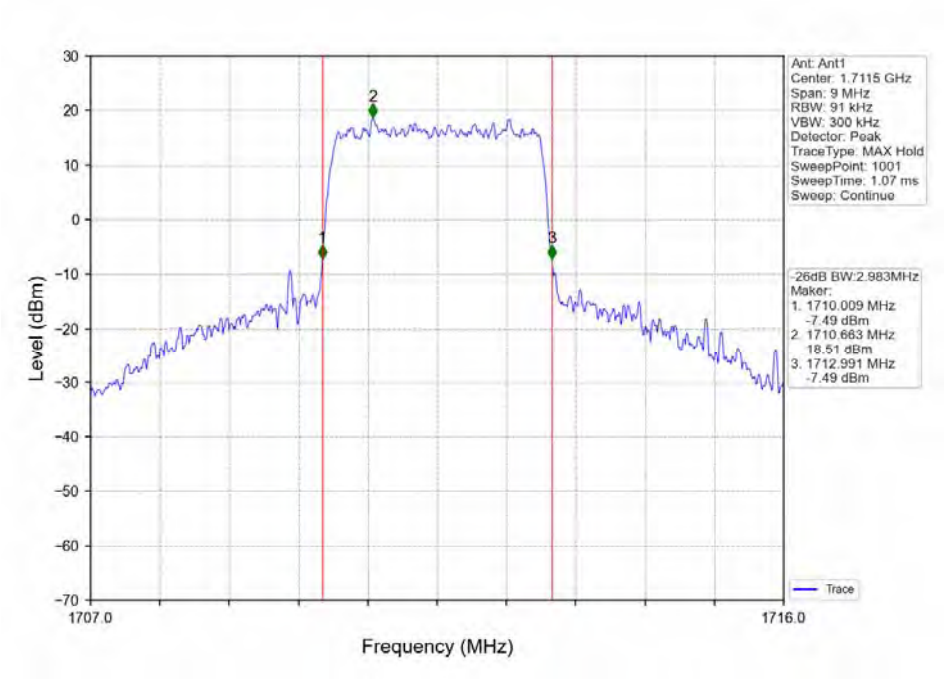
Band4_3MHz_QPSK_MCH_1732.5MHz_RB_15_0_NTNV



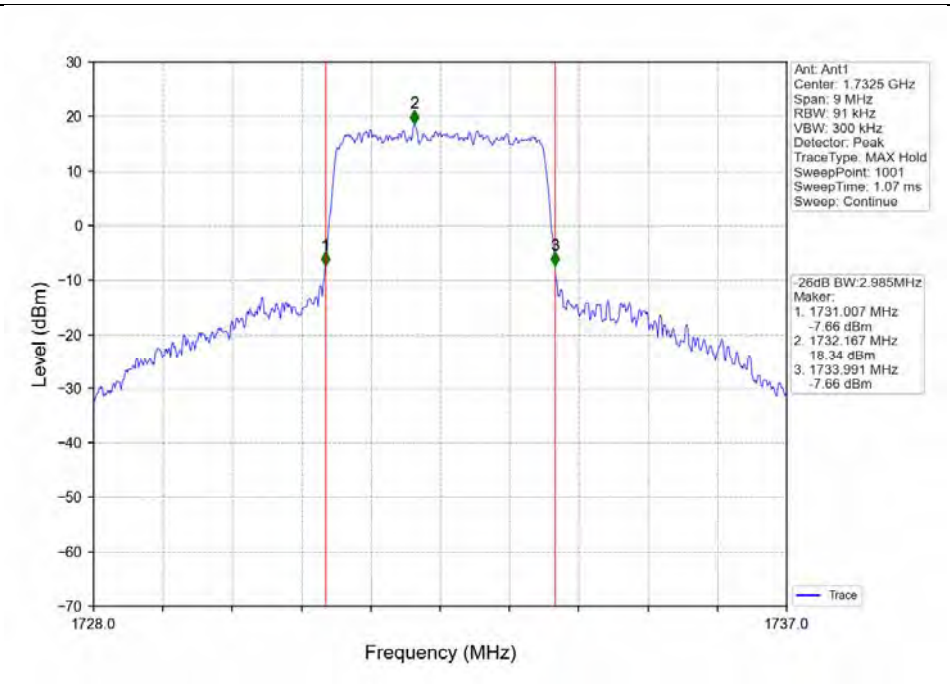
Band4_3MHz_QPSK_HCH_1753.5MHz_RB_15_0_NTNV



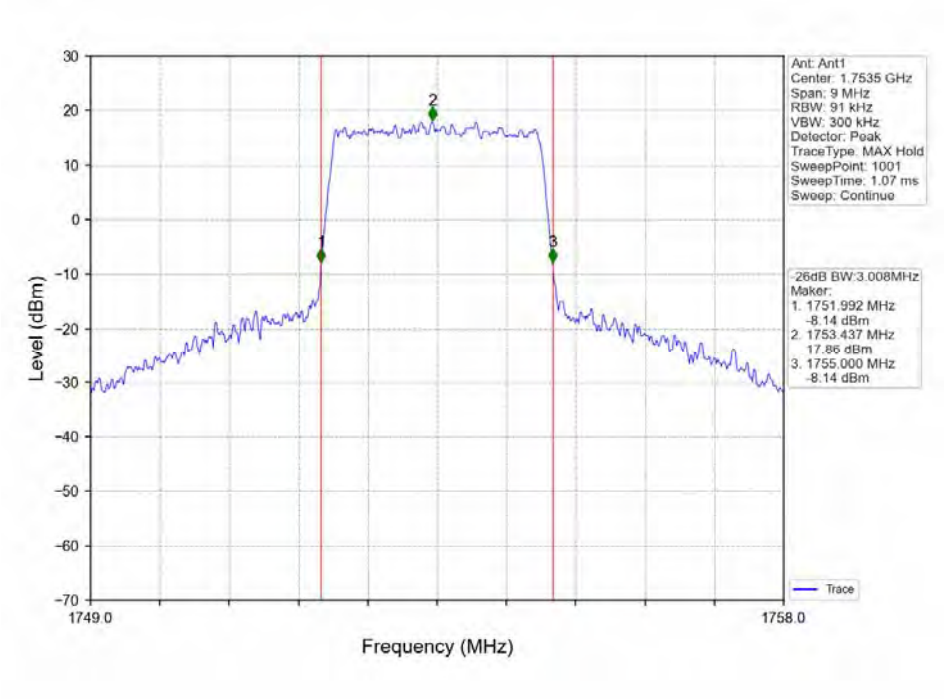
Band4_3MHz_16QAM_LCH_1711.5MHz_RB_15_0_NTNV



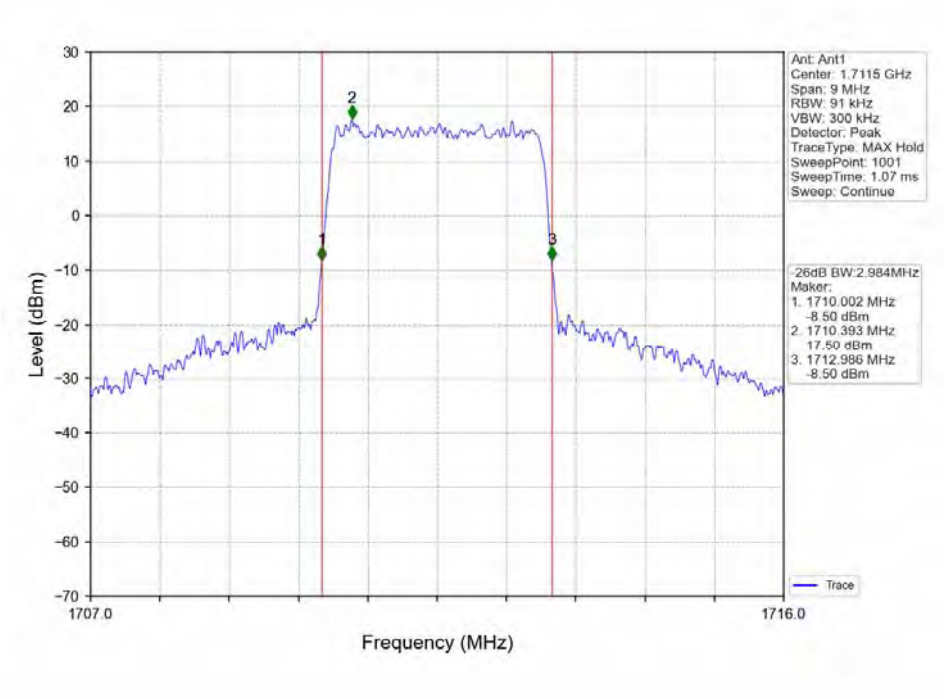
Band4_3MHz_16QAM_MCH_1732.5MHz_RB_15_0_NTNV



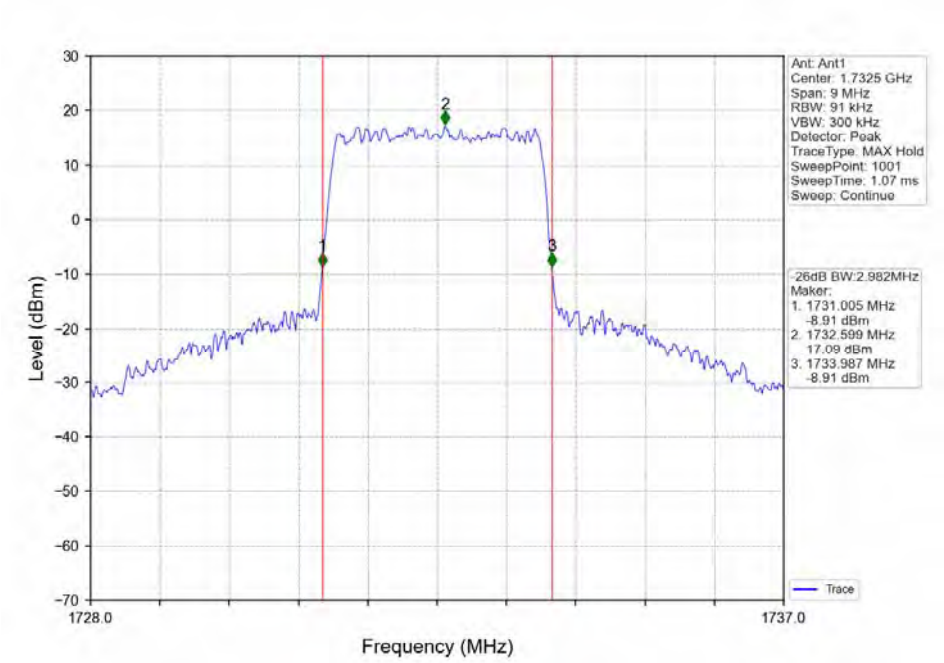
Band4_3MHz_16QAM_HCH_1753.5MHz_RB_15_0_NTNV



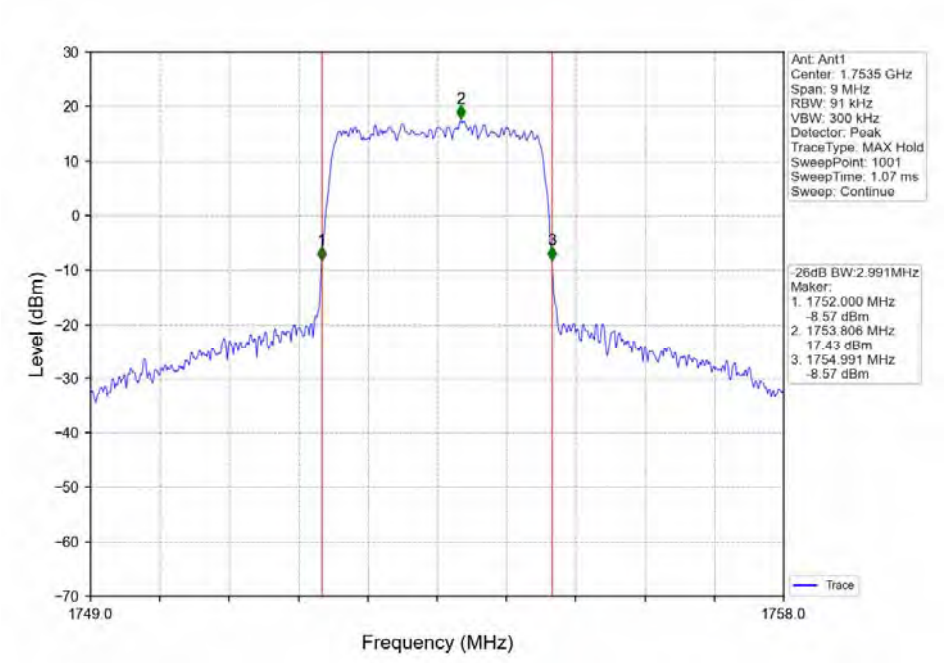
Band4_3MHz_64QAM_LCH_1711.5MHz_RB_15_0_NTNV

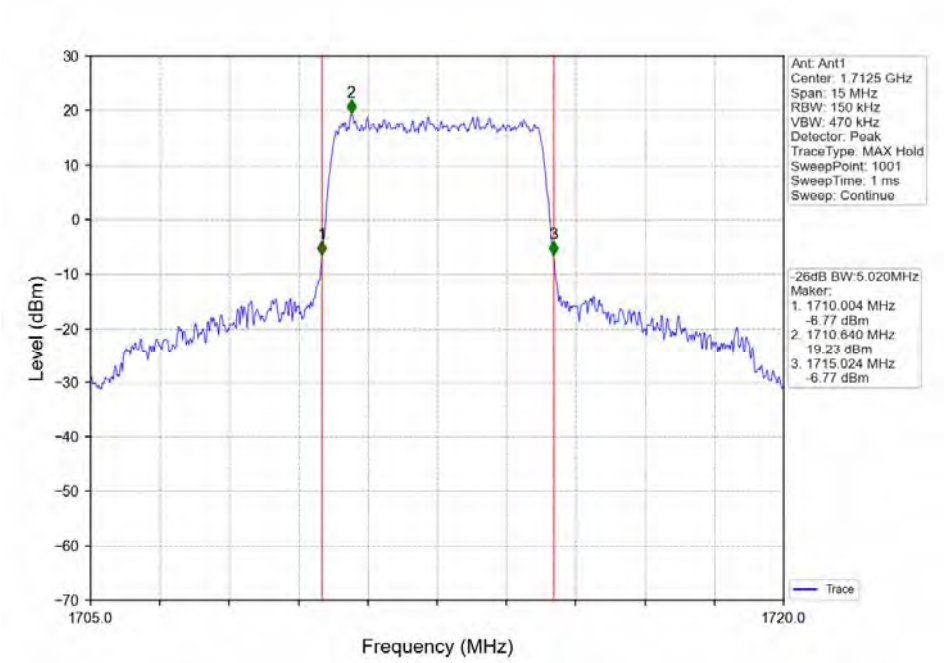
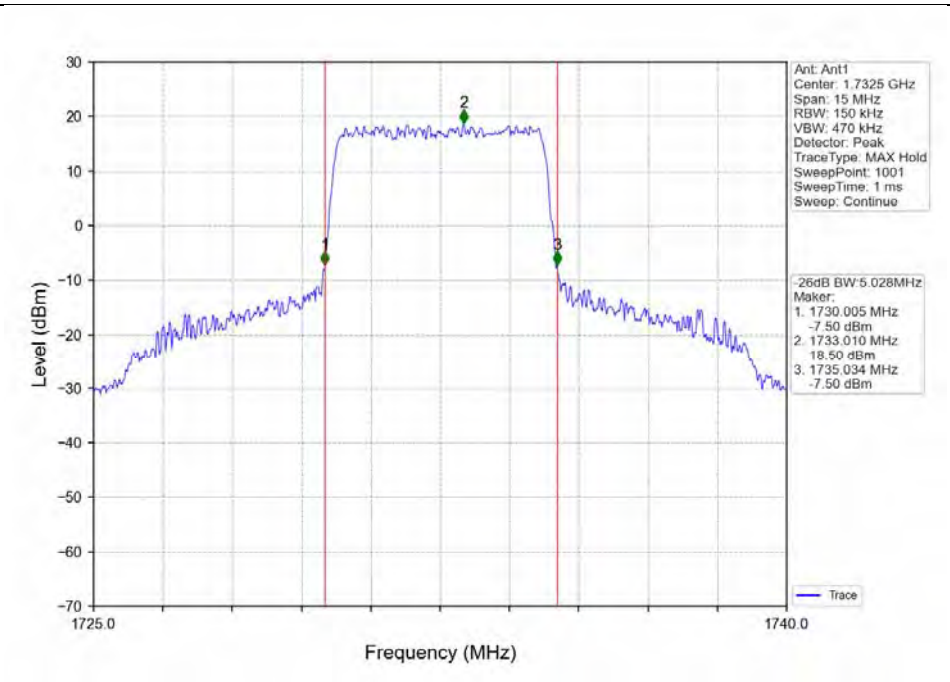


Band4_3MHz_64QAM_MCH_1732.5MHz_RB_15_0_NTNV

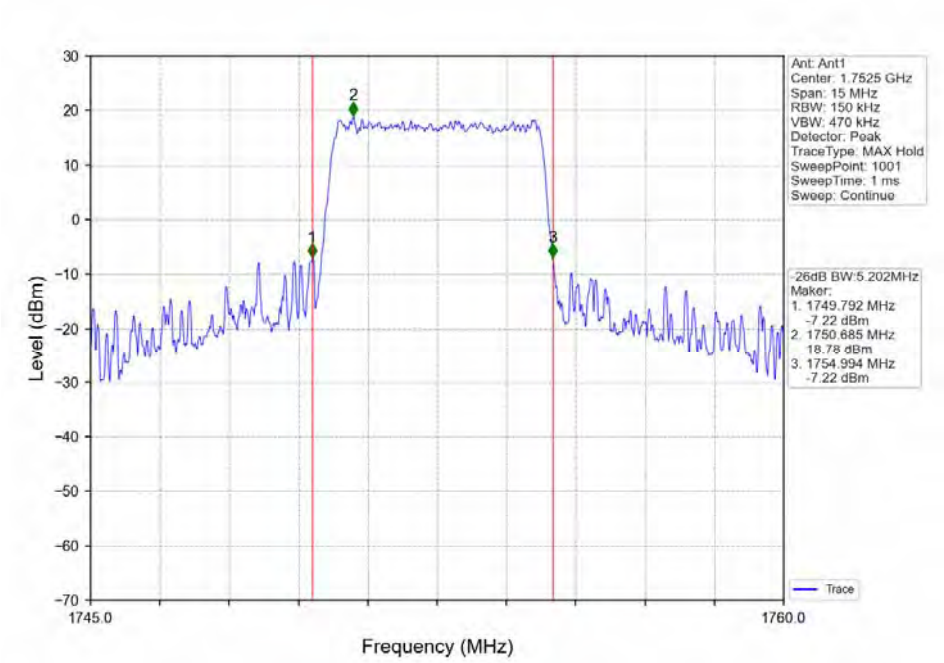


Band4_3MHz_64QAM_HCH_1753.5MHz_RB_15_0_NTNV

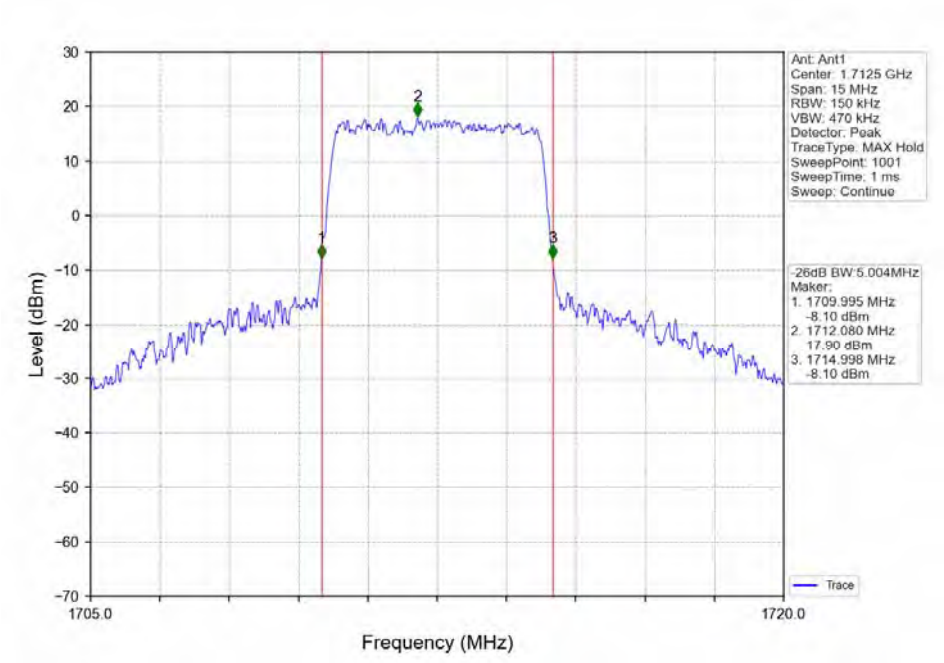


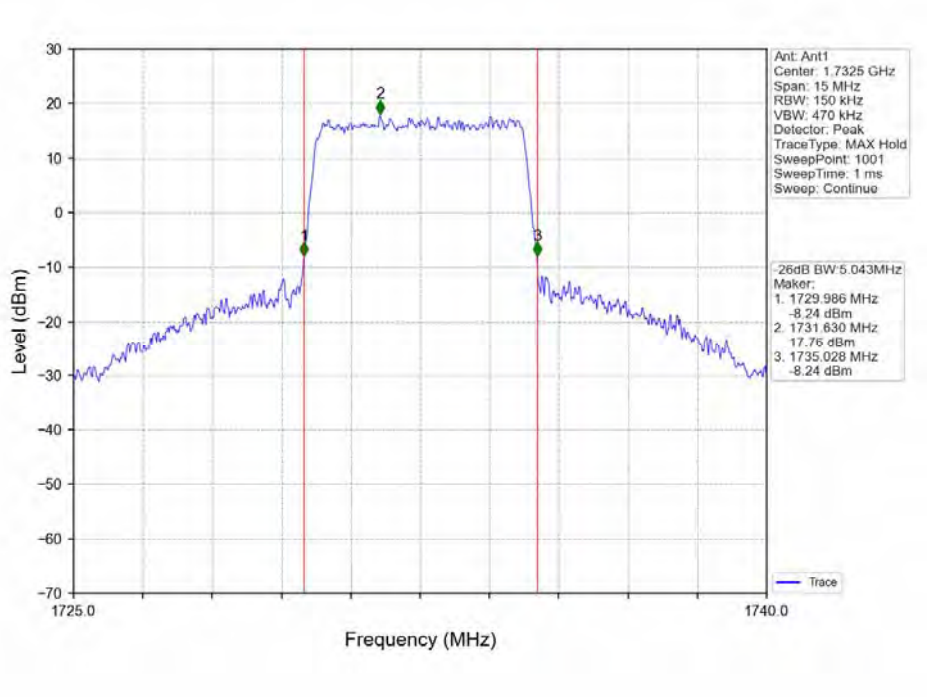
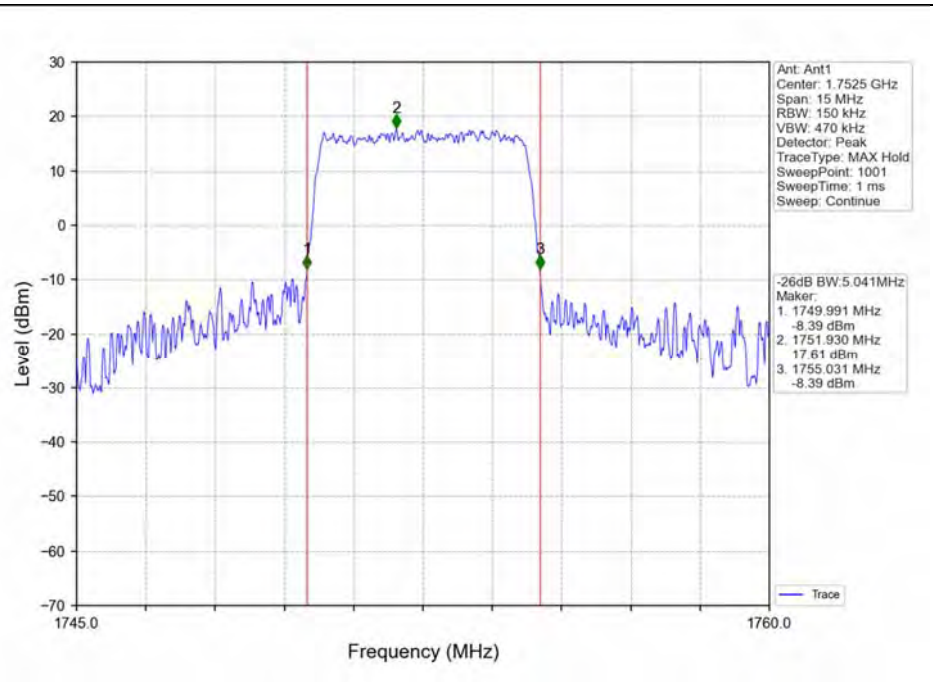
Band4_5MHz_QPSK_LCH_1712.5MHz_RB_25_0_NTNV

Band4_5MHz_QPSK_MCH_1732.5MHz_RB_25_0_NTNV


Band4_5MHz_QPSK_HCH_1752.5MHz_RB_25_0_NTNV

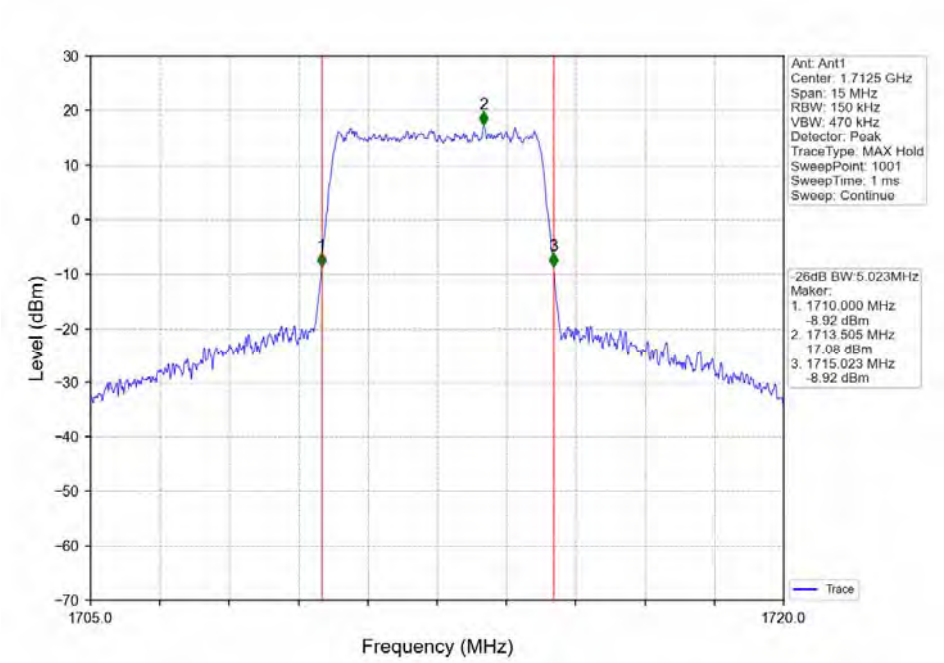


Band4_5MHz_16QAM_LCH_1712.5MHz_RB_25_0_NTNV

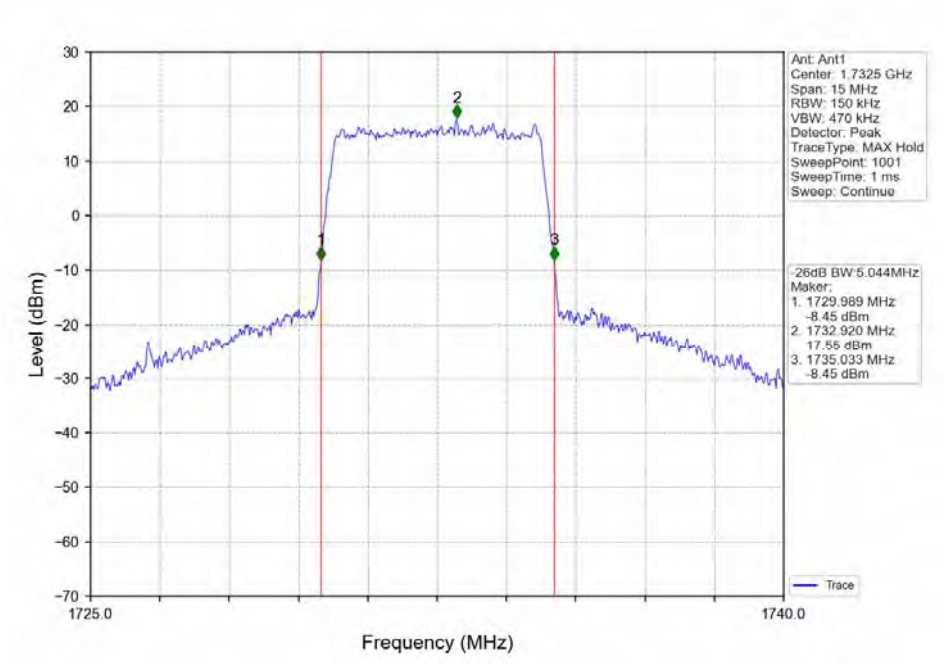


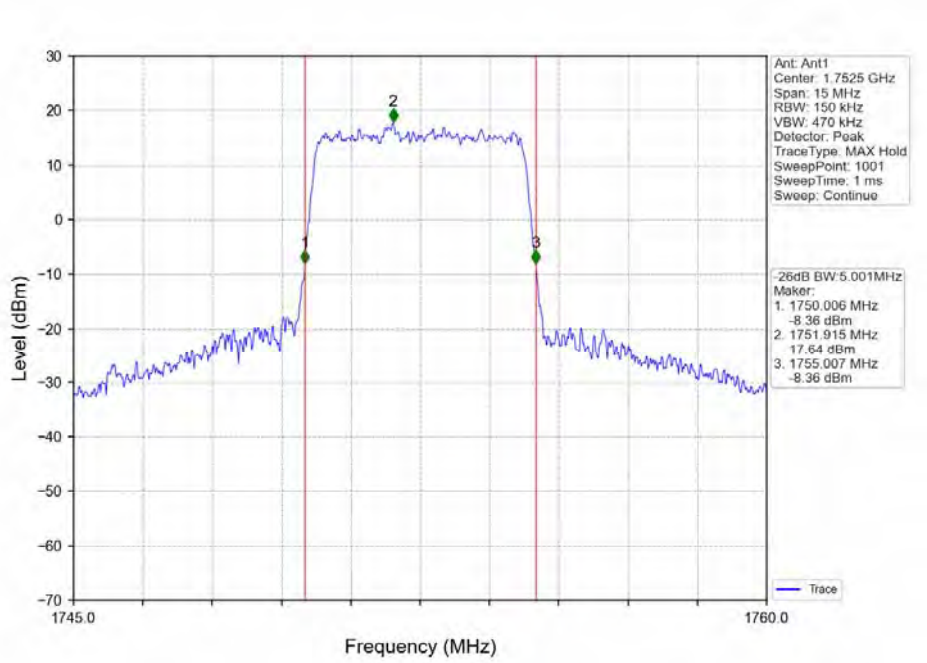
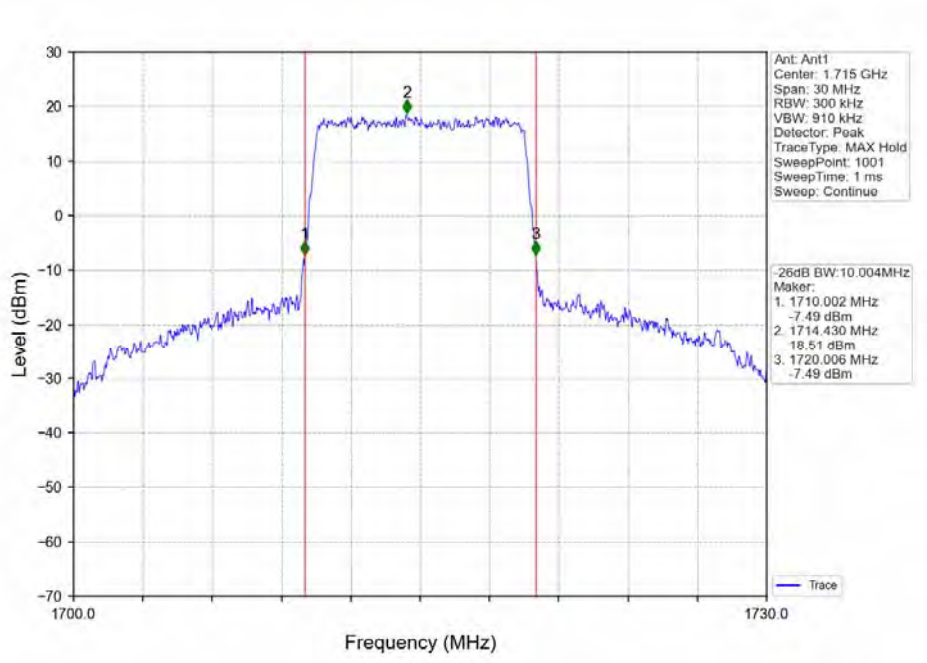
Band4_5MHz_16QAM_MCH_1732.5MHz_RB_25_0_NTNV

Band4_5MHz_16QAM_HCH_1752.5MHz_RB_25_0_NTNV


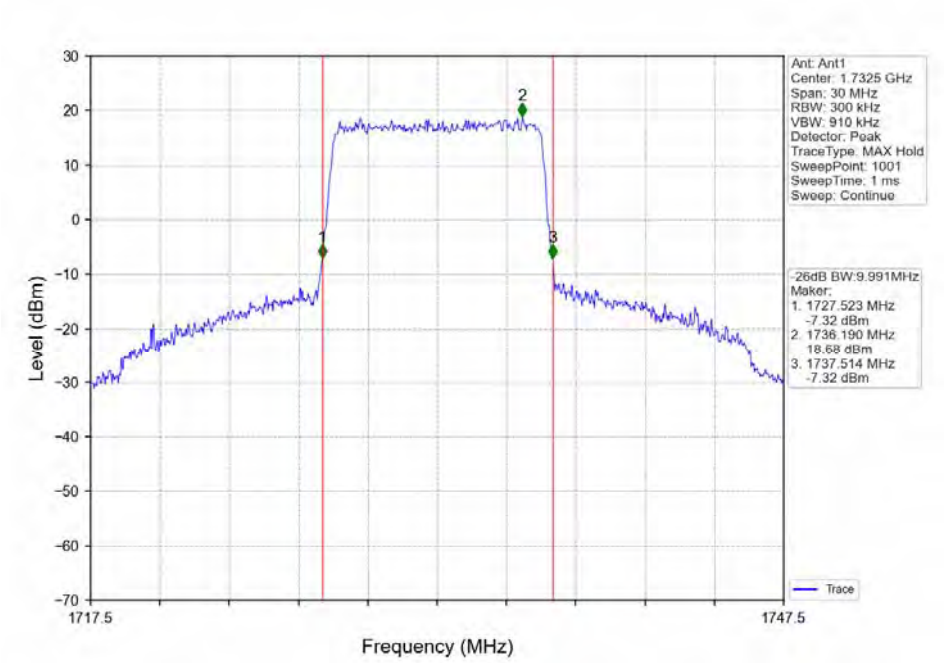
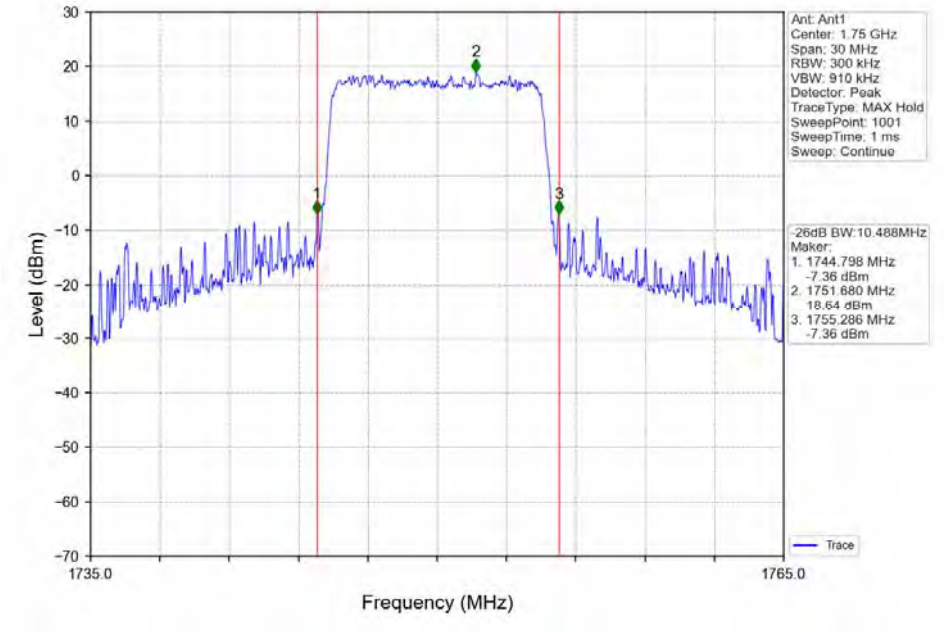
Band4_5MHz_64QAM_LCH_1712.5MHz_RB_25_0_NTNV



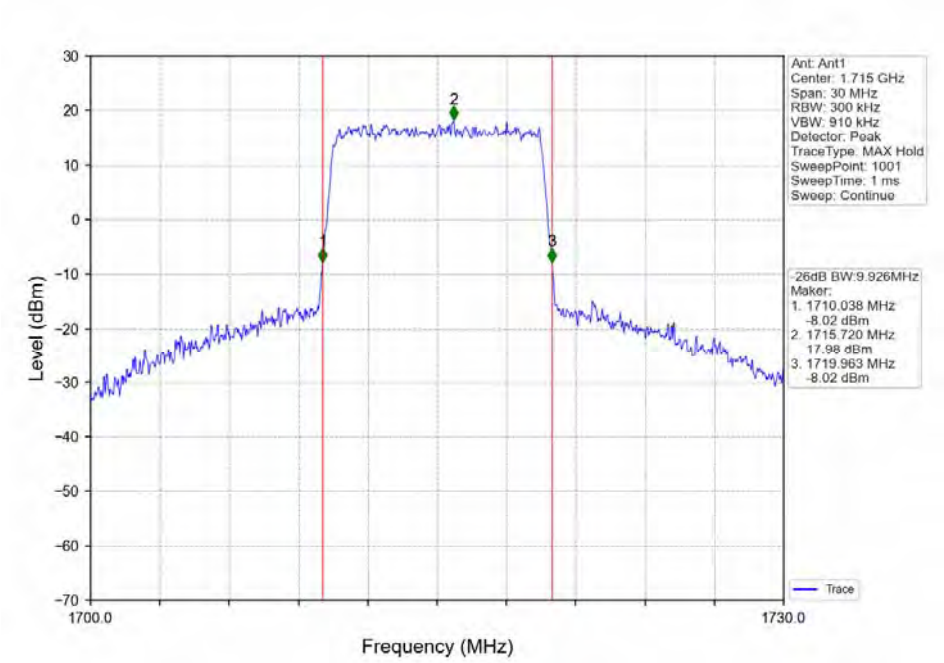
Band4_5MHz_64QAM_MCH_1732.5MHz_RB_25_0_NTNV



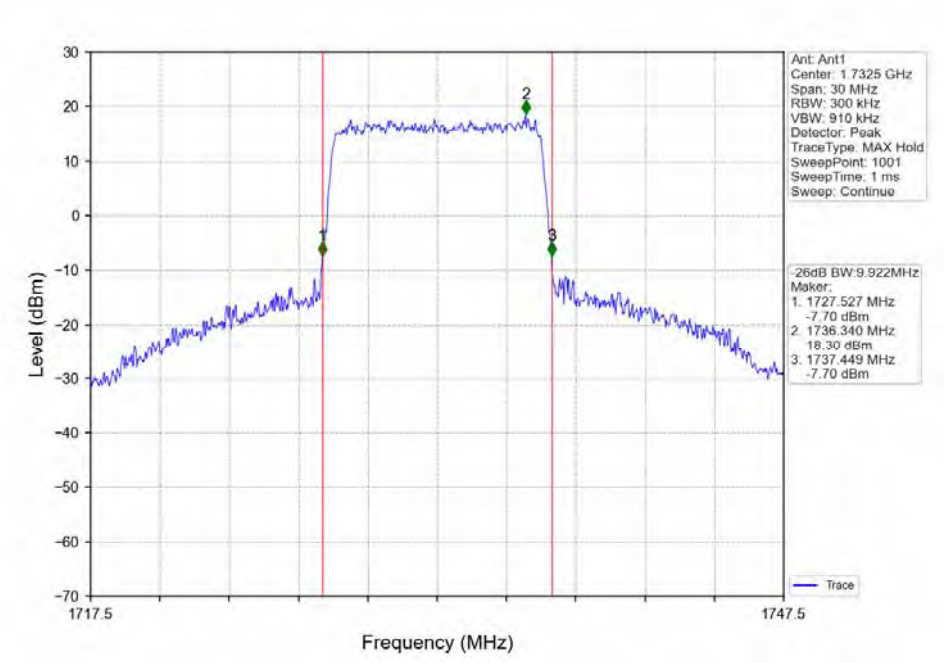
Band4_5MHz_64QAM_HCH_1752.5MHz_RB_25_0_NTNV

Band4_10MHz_QPSK_LCH_1715MHz_RB_50_0_NTNV


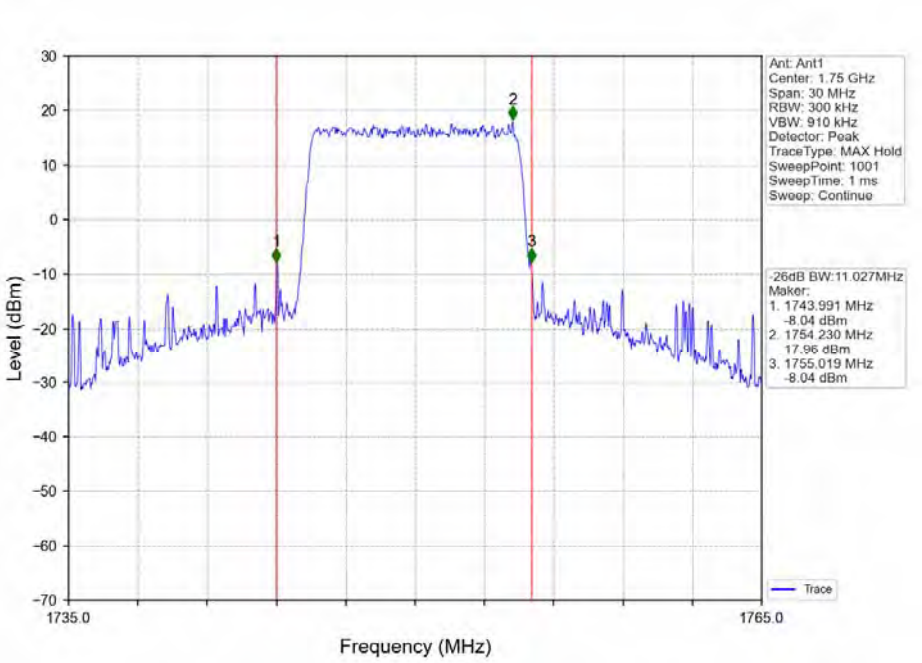
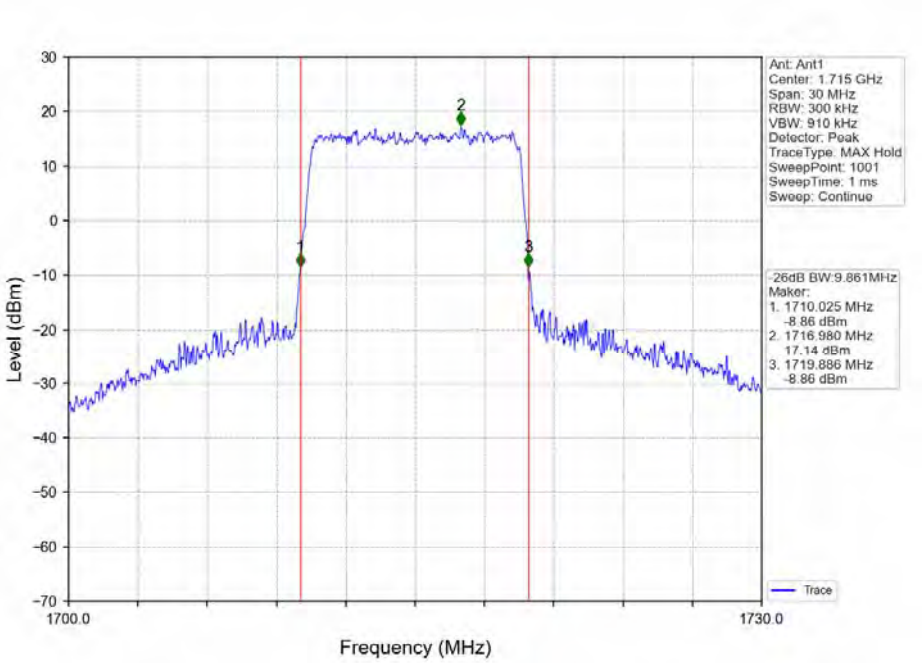
Band4_10MHz_QPSK_MCH_1732.5MHz_RB_50_0_NTNV

Band4_10MHz_QPSK_HCH_1750MHz_RB_50_0_NTNV


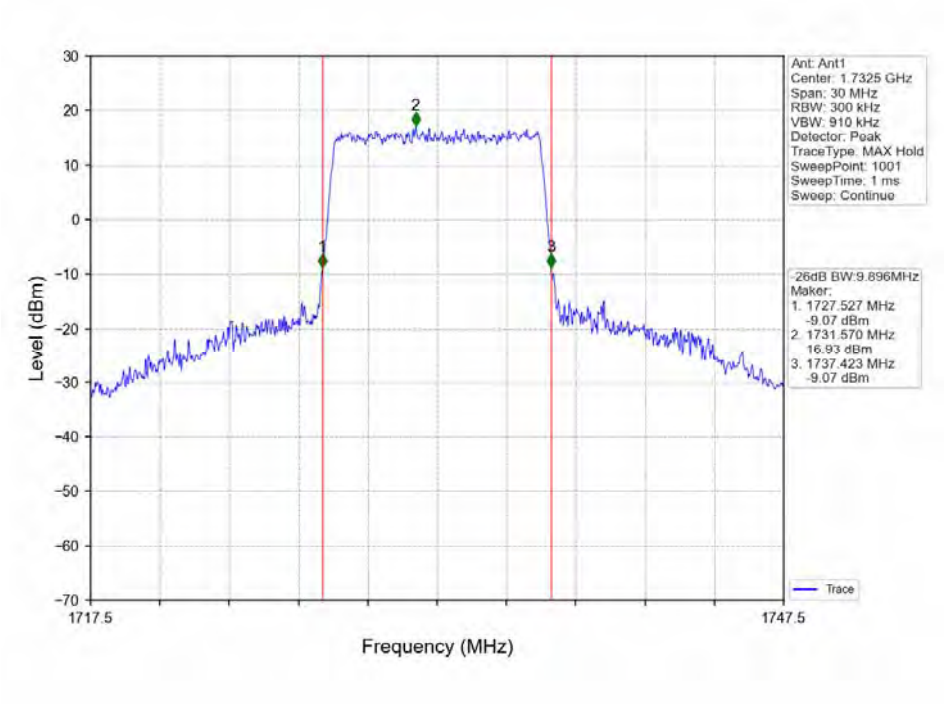
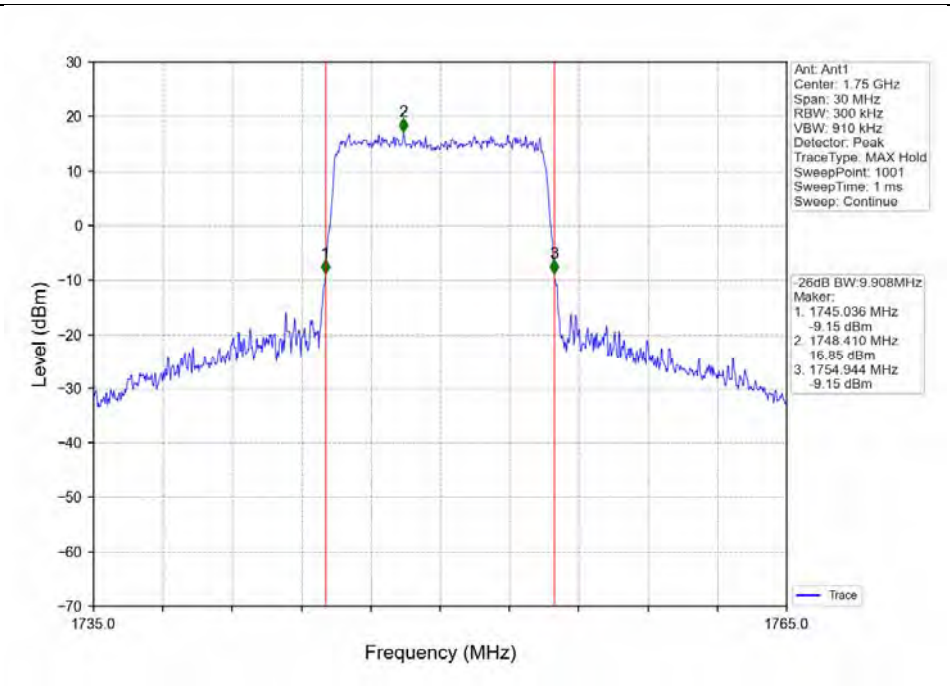
Band4_10MHz_16QAM_LCH_1715MHz_RB_50_0_NTNV

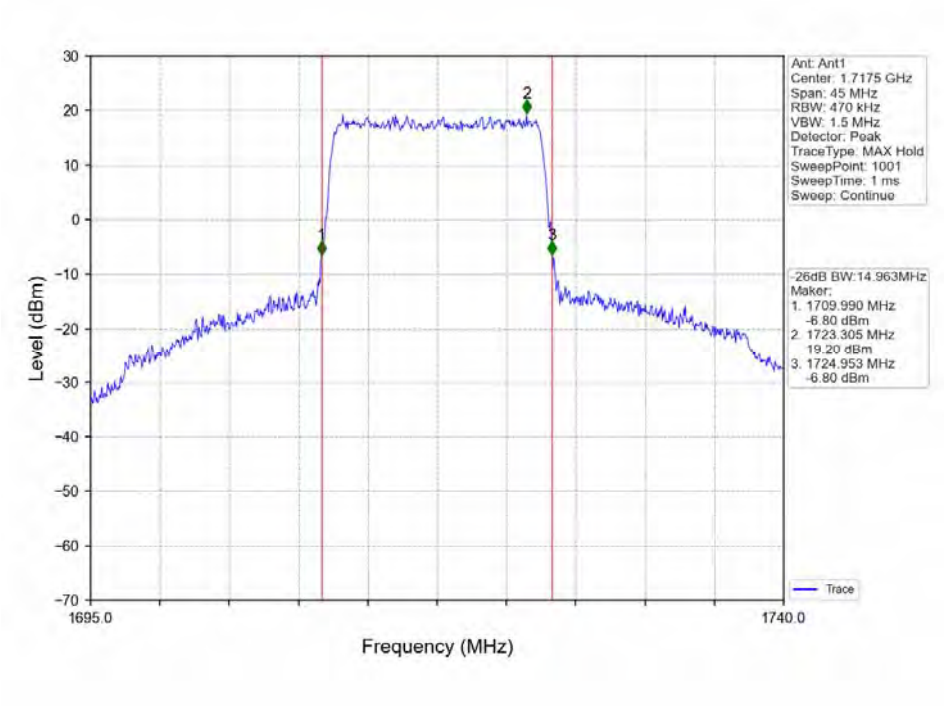
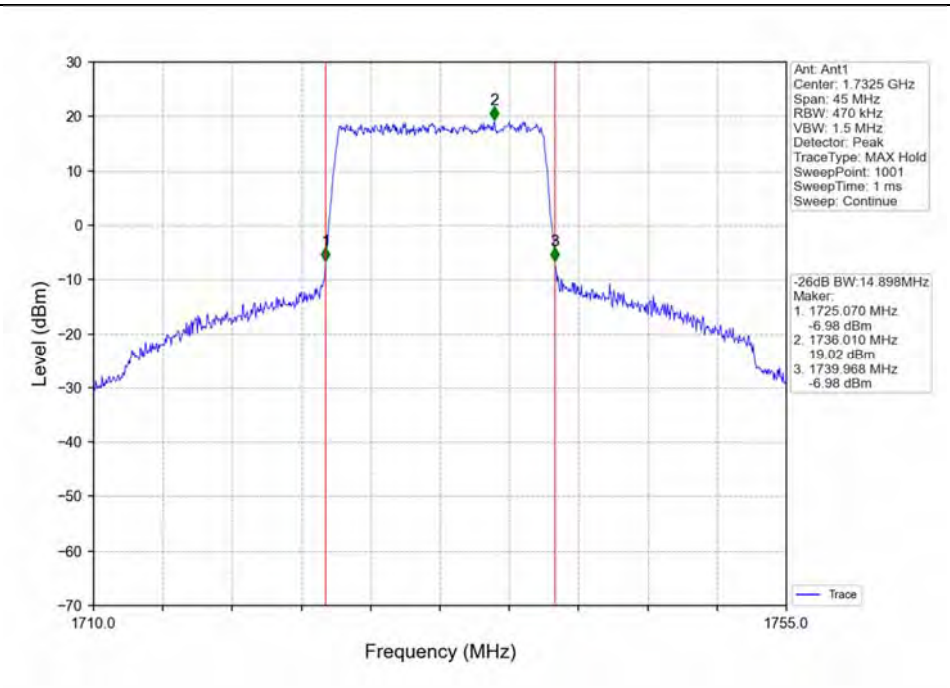


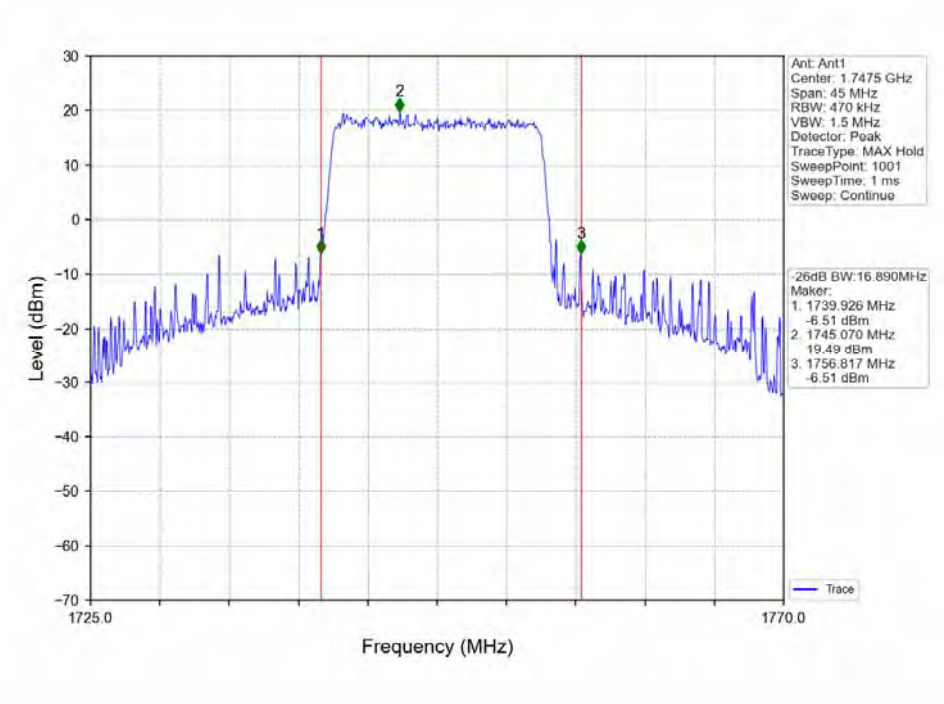
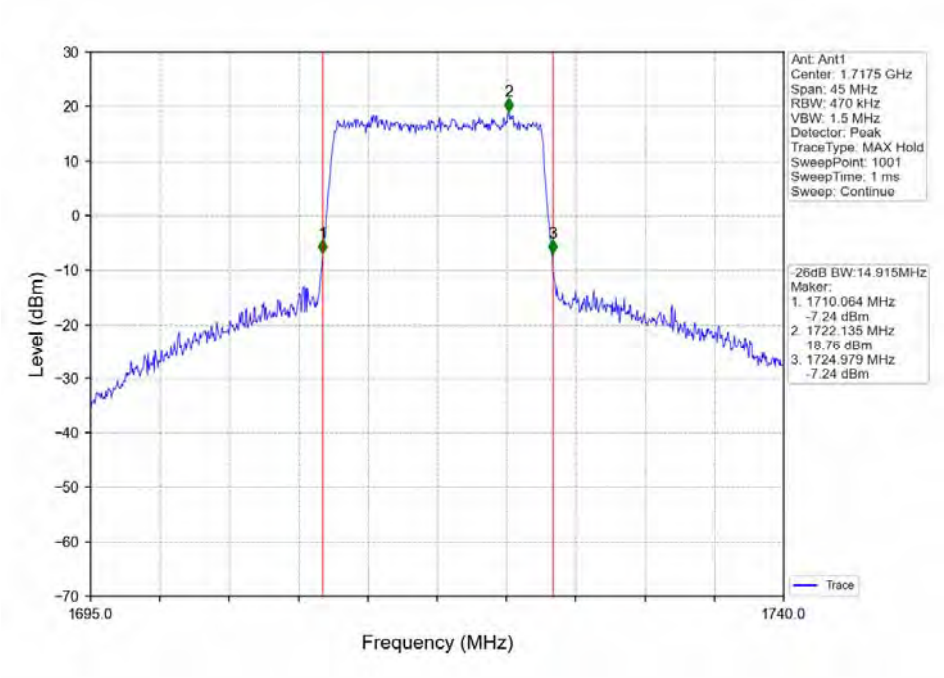
Band4_10MHz_16QAM_MCH_1732.5MHz_RB_50_0_NTNV



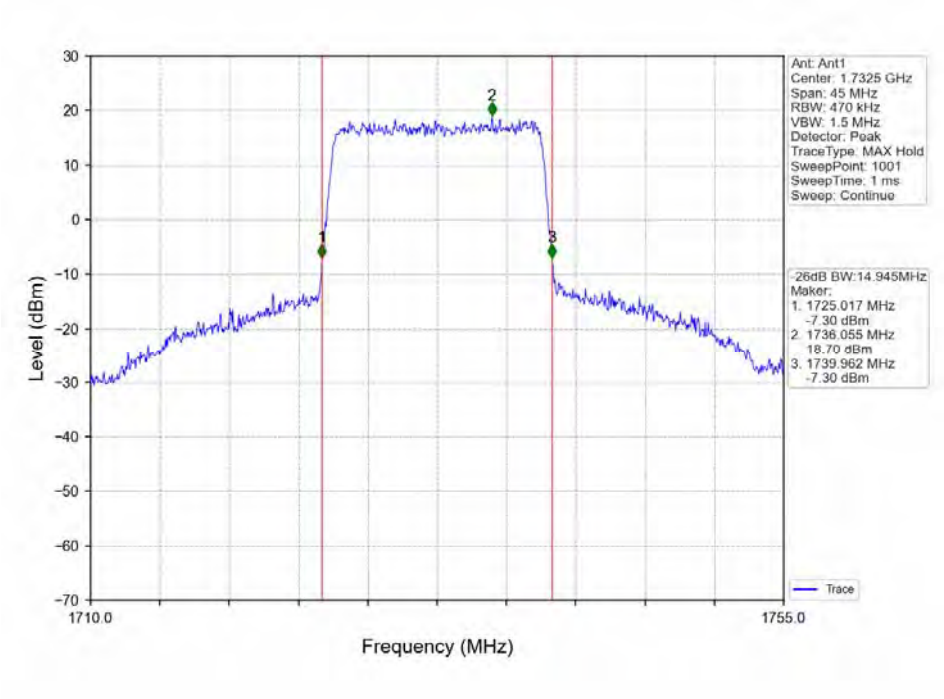
Band4_10MHz_16QAM_HCH_1750MHz_RB_50_0_NTNV

Band4_10MHz_64QAM_LCH_1715MHz_RB_50_0_NTNV


Band4_10MHz_64QAM_MCH_1732.5MHz_RB_50_0_NTNV

Band4_10MHz_64QAM_HCH_1750MHz_RB_50_0_NTNV


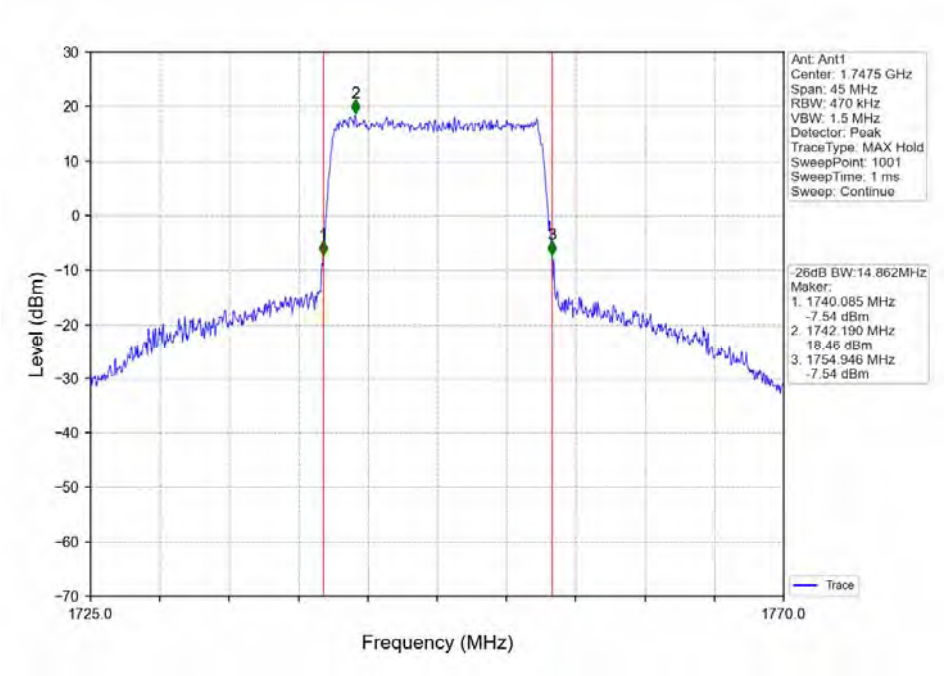
Band4_15MHz_QPSK_LCH_1717.5MHz_RB_75_0_NTNV

Band4_15MHz_QPSK_MCH_1732.5MHz_RB_75_0_NTNV


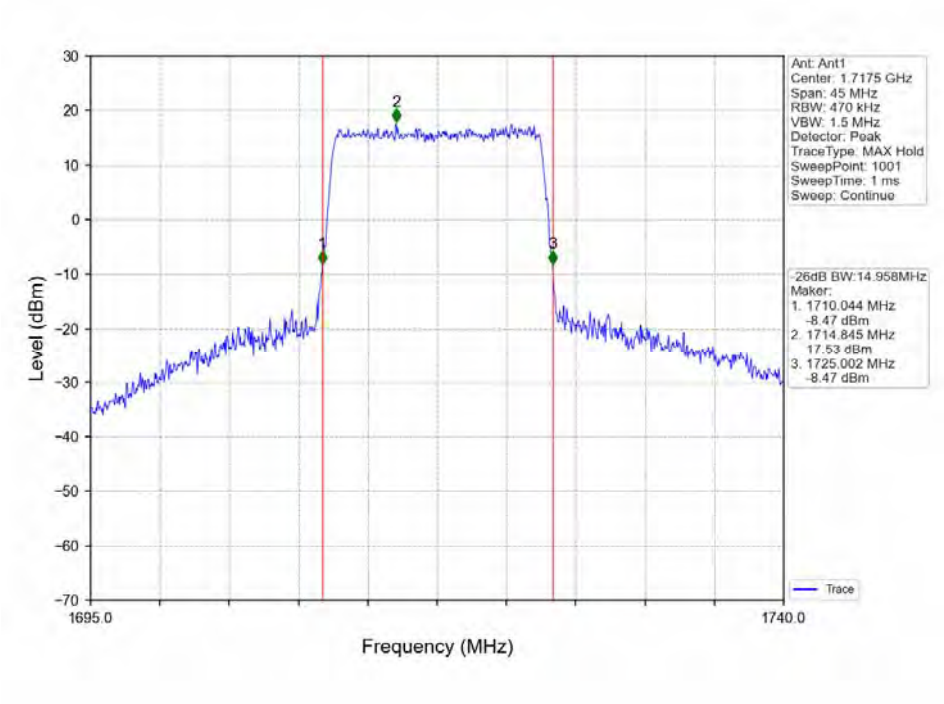
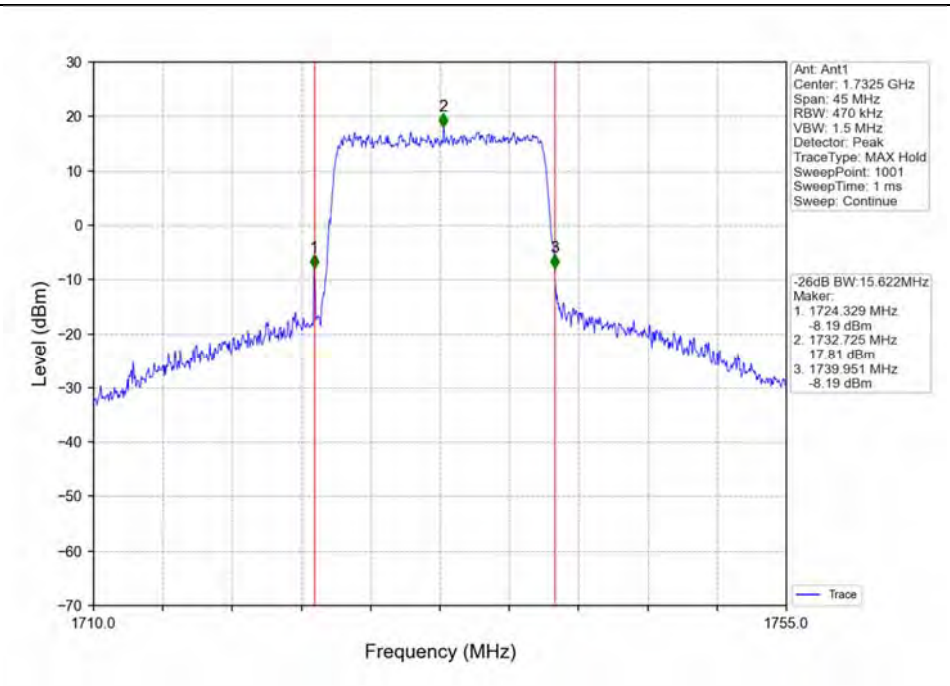
Band4_15MHz_QPSK_HCH_1747.5MHz_RB_75_0_NTNV

Band4_15MHz_16QAM_LCH_1717.5MHz_RB_75_0_NTNV


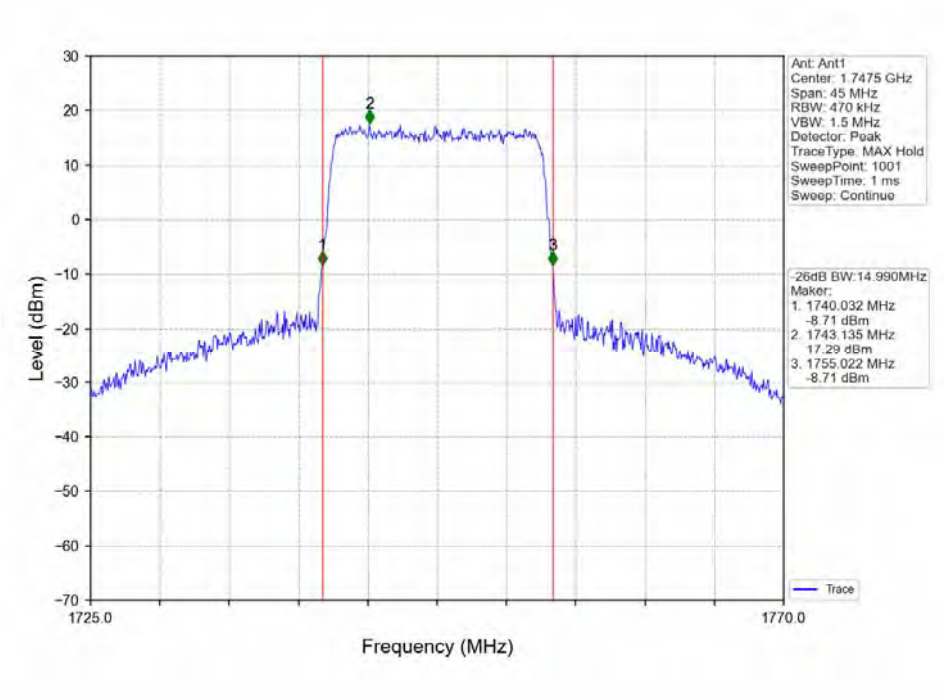
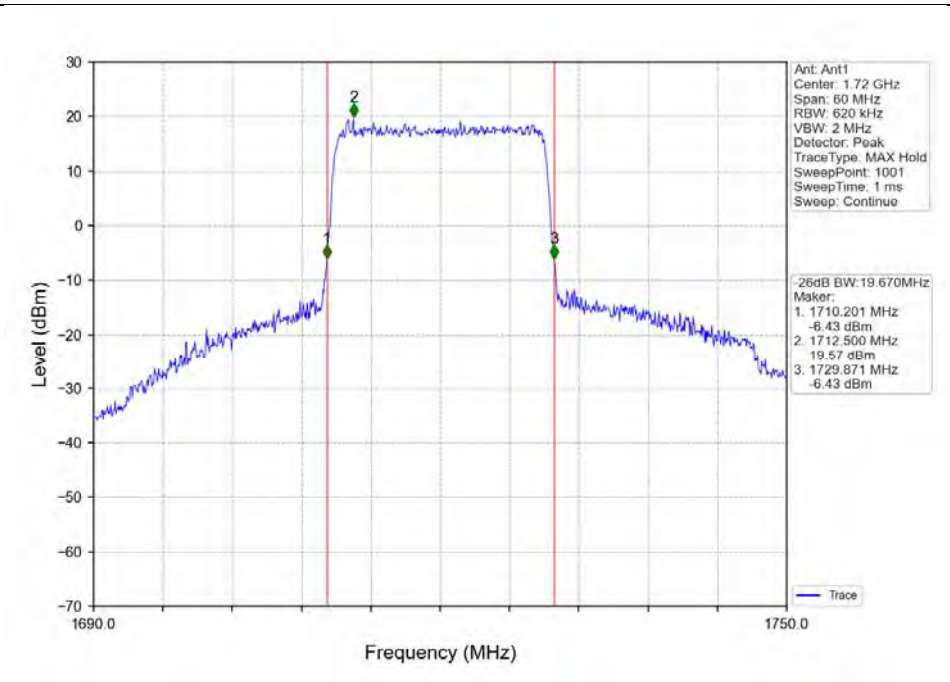
Band4_15MHz_16QAM_MCH_1732.5MHz_RB_75_0_NTNV

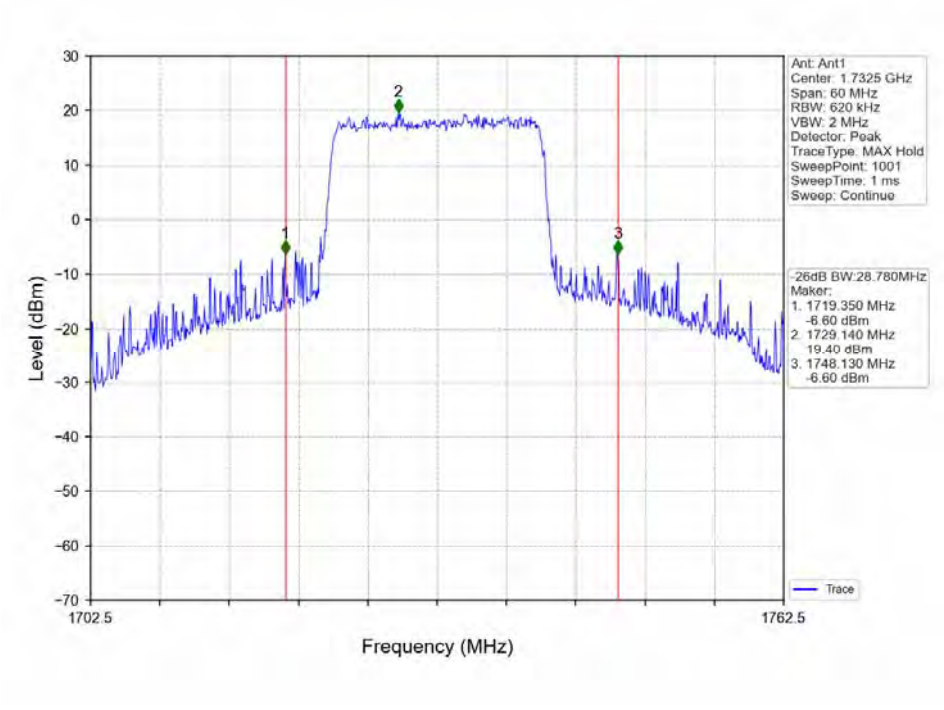
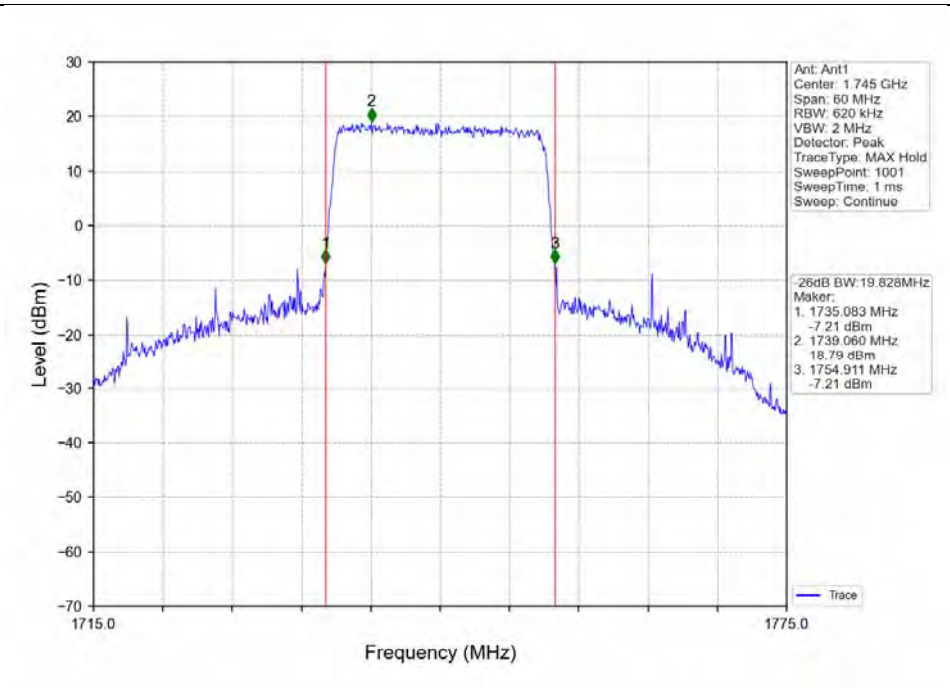


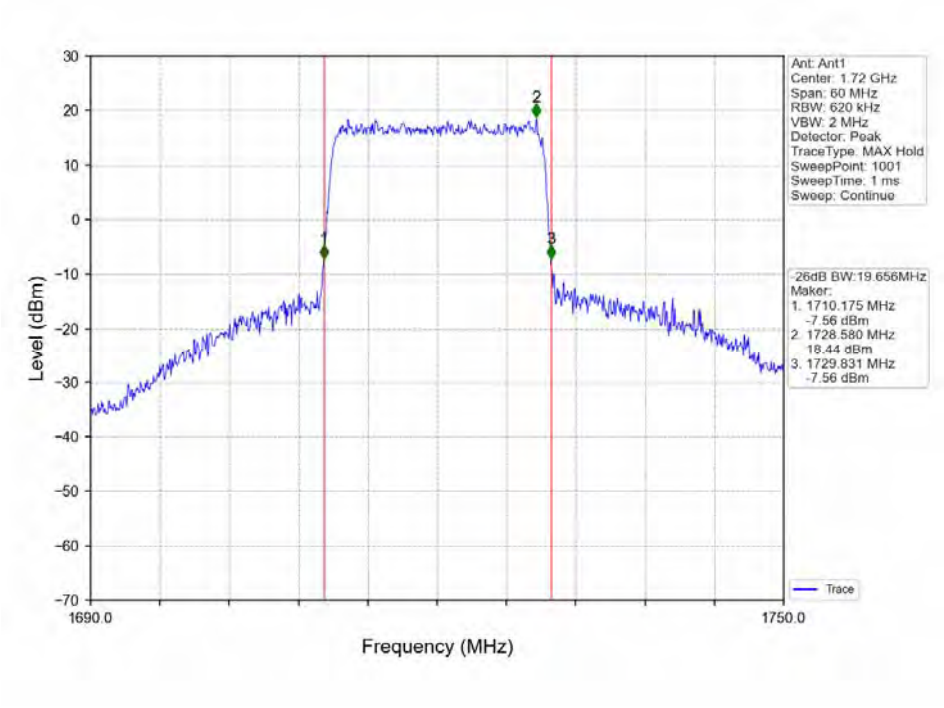
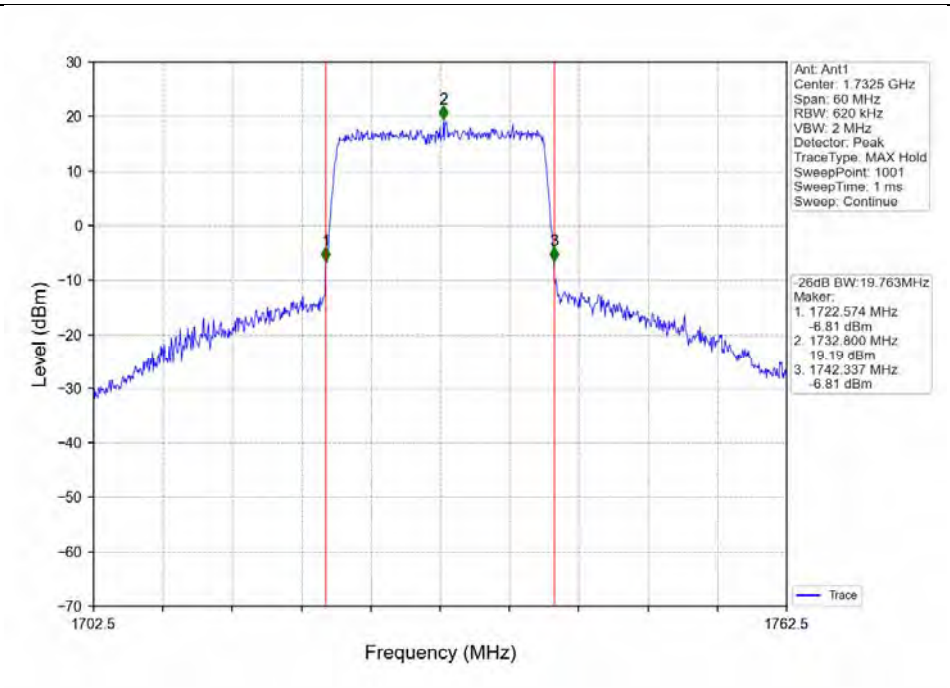
Band4_15MHz_16QAM_HCH_1747.5MHz_RB_75_0_NTNV



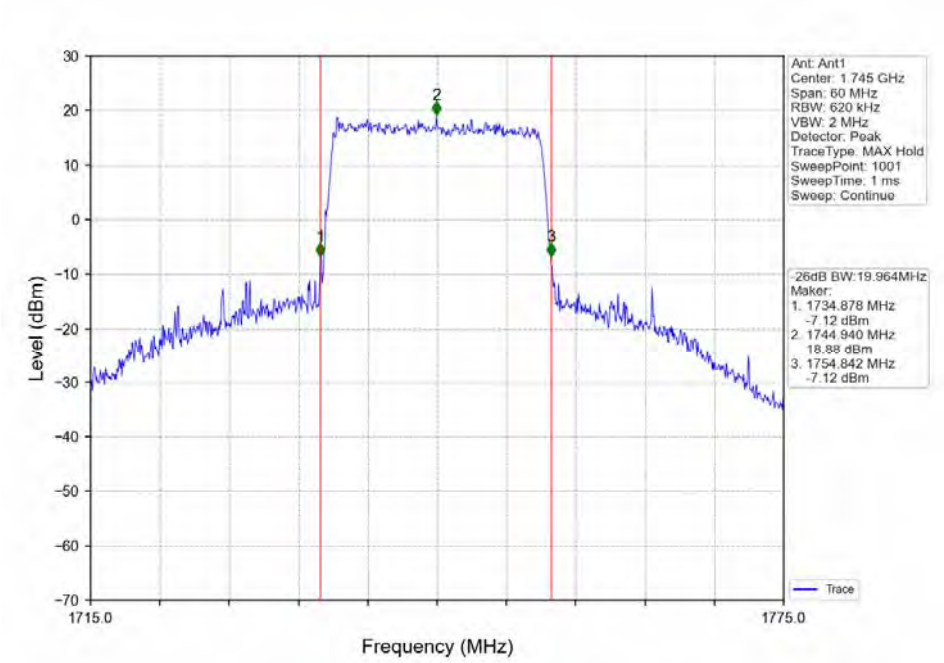
Band4_15MHz_64QAM_LCH_1717.5MHz_RB_75_0_NTNV

Band4_15MHz_64QAM_MCH_1732.5MHz_RB_75_0_NTNV


Band4_15MHz_64QAM_HCH_1747.5MHz_RB_75_0_NTNV

Band4_20MHz_QPSK_LCH_1720MHz_RB_100_0_NTNV


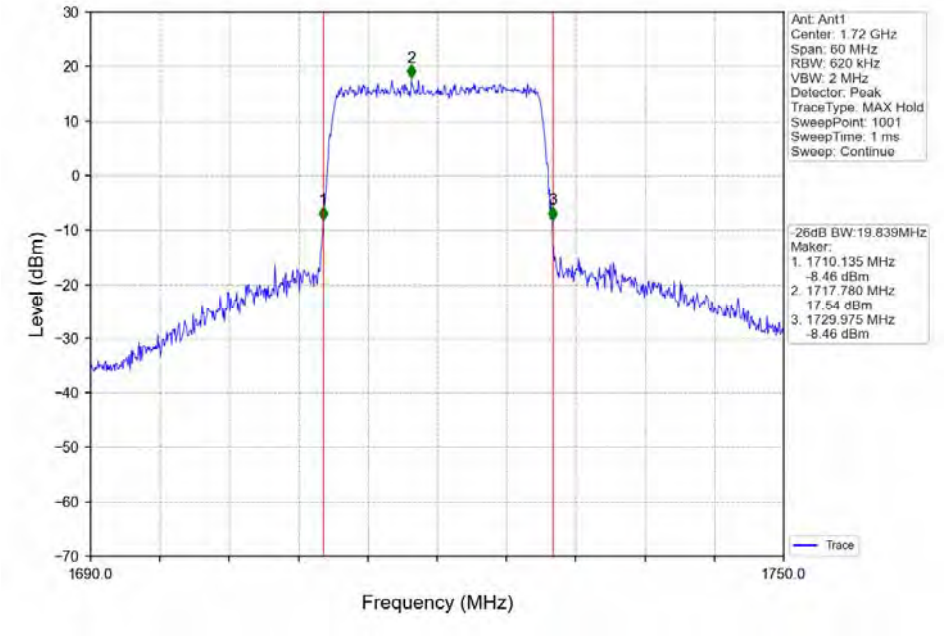
Band4_20MHz_QPSK_MCH_1732.5MHz_RB_100_0_NTNV

Band4_20MHz_QPSK_HCH_1745MHz_RB_100_0_NTNV


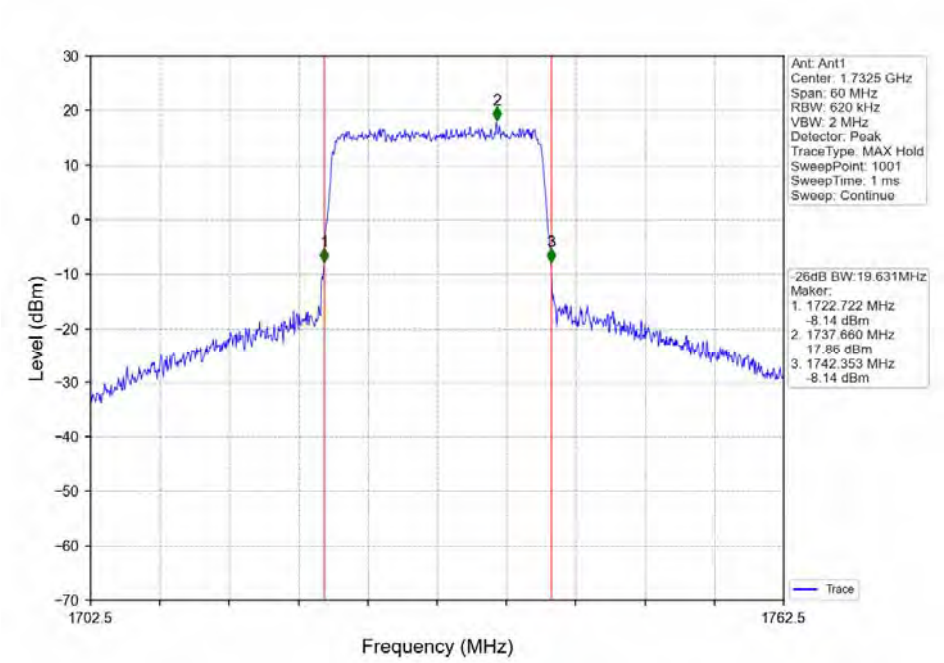
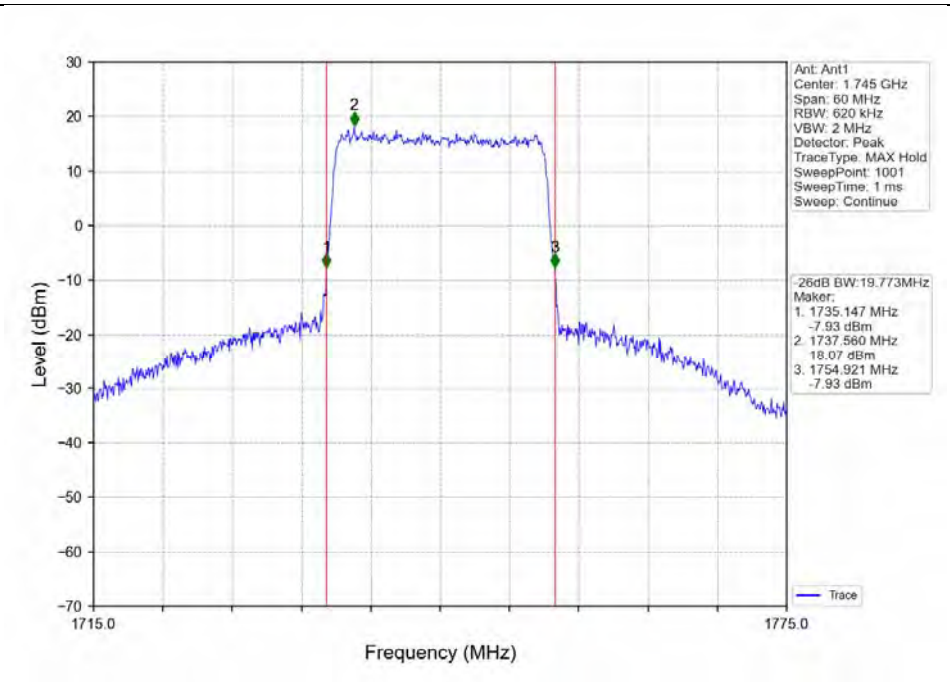
Band4_20MHz_16QAM_LCH_1720MHz_RB_100_0_NTNV

Band4_20MHz_16QAM_MCH_1732.5MHz_RB_100_0_NTNV


Band4_20MHz_16QAM_HCH_1745MHz_RB_100_0_NTNV



Band4_20MHz_64QAM_LCH_1720MHz_RB_100_0_NTNV



Band4_20MHz_64QAM_MCH_1732.5MHz_RB_100_0_NTNV

Band4_20MHz_64QAM_HCH_1745MHz_RB_100_0_NTNV


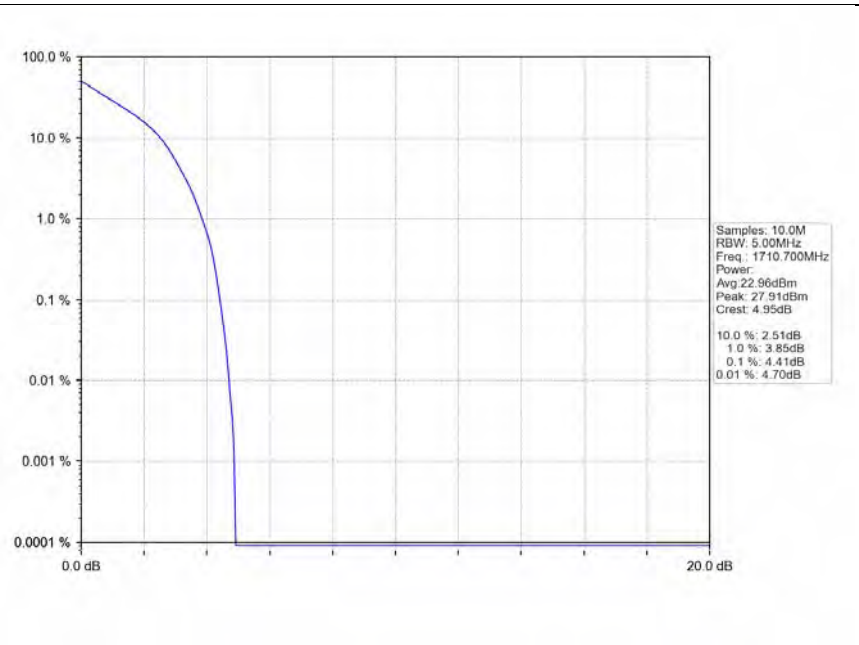
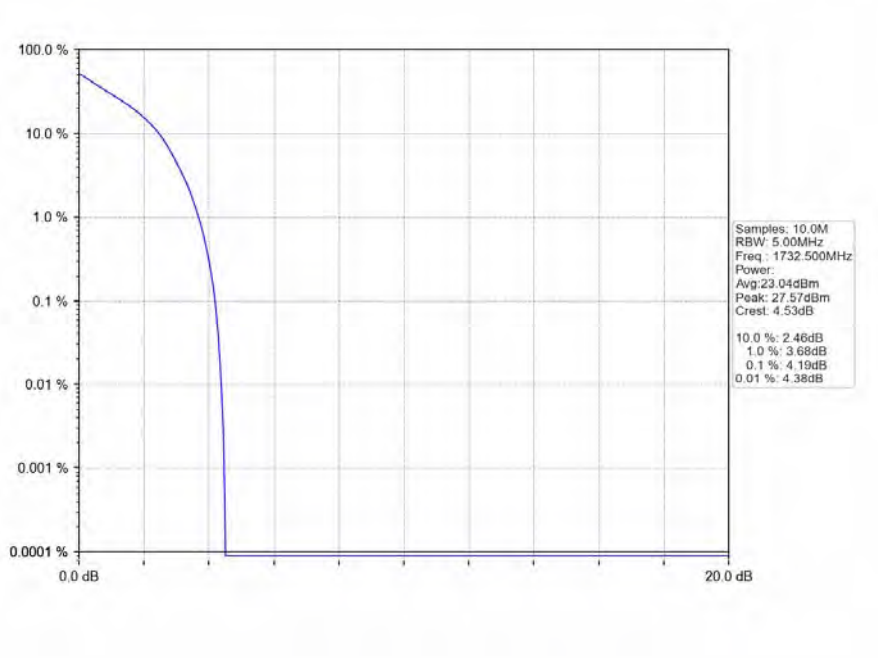
Peak-Average Ratio

B4_1.4MHz

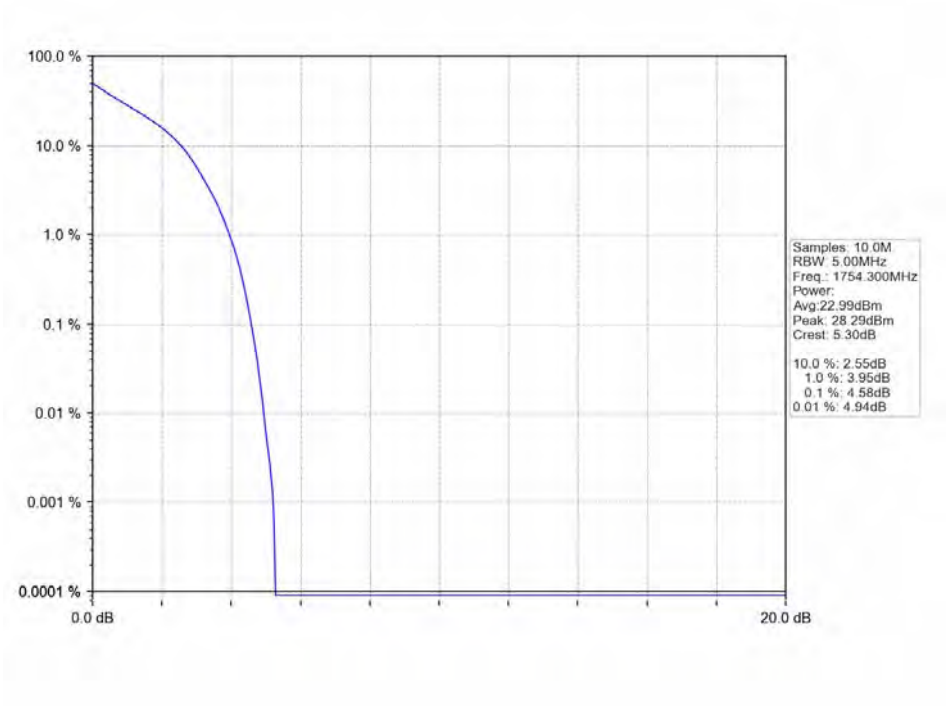
Test Result

Band: 4 / Bandwidth: 1.4MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	1710.7	6	0	4.41	<=13	Pass
	1732.5	6	0	4.19	<=13	Pass
	1754.3	6	0	4.58	<=13	Pass
16QAM	1710.7	6	0	5.27	<=13	Pass
	1732.5	6	0	5.10	<=13	Pass
	1754.3	6	0	5.41	<=13	Pass
64QAM	1710.7	6	0	5.67	<=13	Pass
	1732.5	6	0	5.80	<=13	Pass
	1754.3	6	0	5.99	<=13	Pass

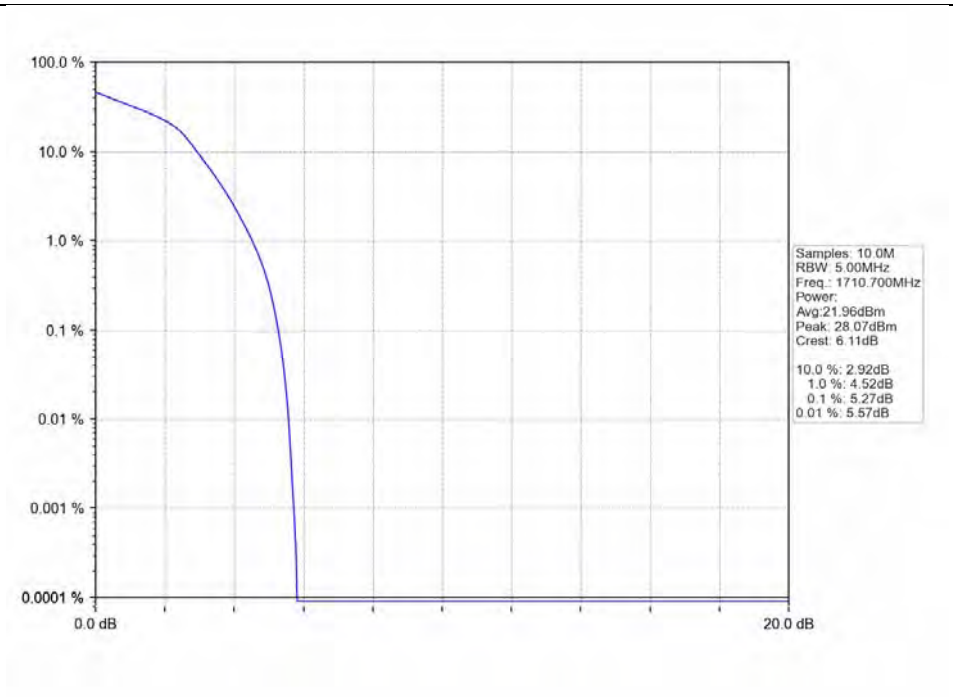
Test Graph

Band4_1.4MHz_QPSK_LCH_1710.7MHz_RB_6_0_NTNV

Band4_1.4MHz_QPSK_MCH_1732.5MHz_RB_6_0_NTNV


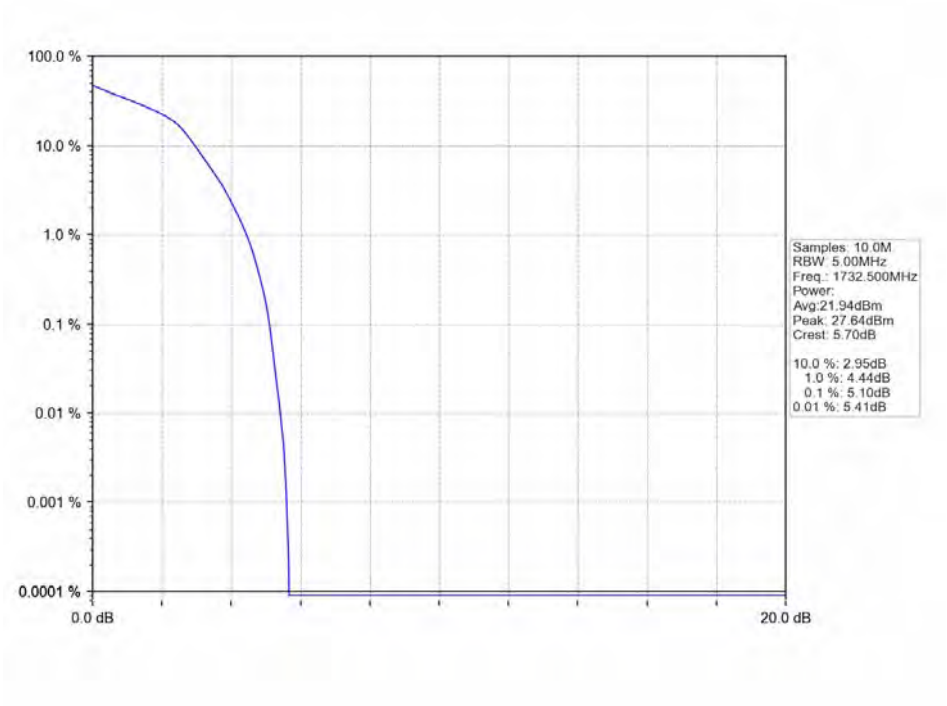
Band4_1.4MHz_QPSK_HCH_1754.3MHz_RB_6_0_NTNV



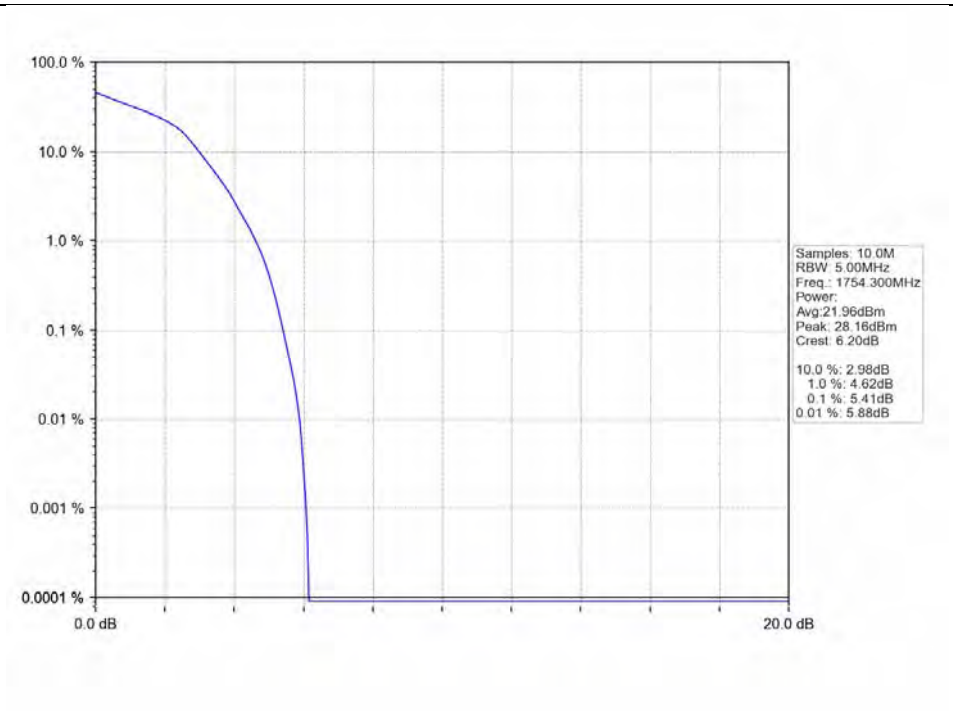
Band4_1.4MHz_16QAM_LCH_1710.7MHz_RB_6_0_NTNV



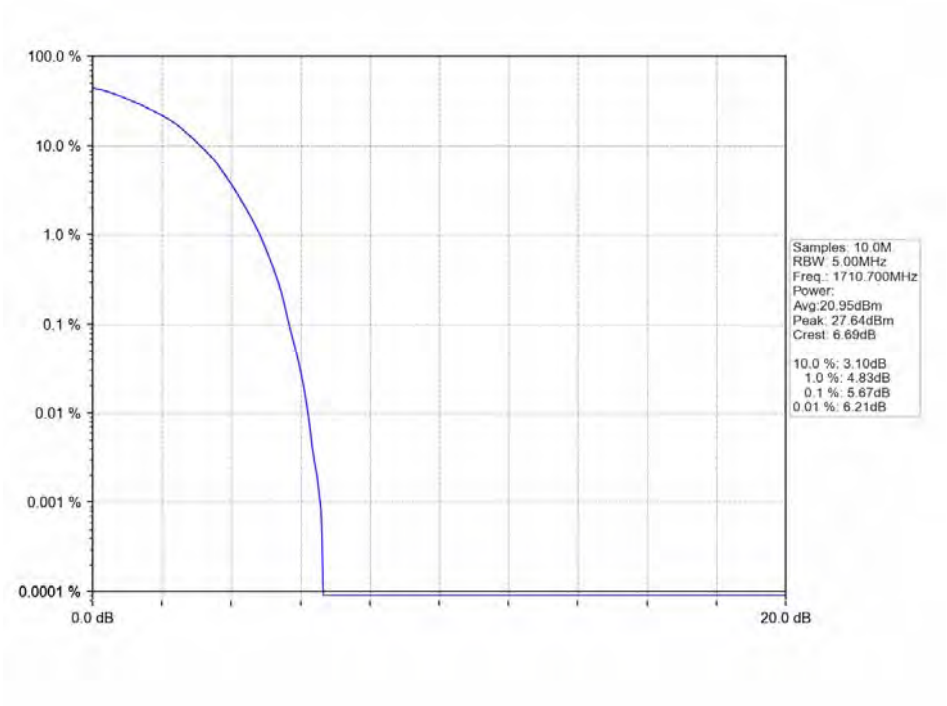
Band4_1.4MHz_16QAM_MCH_1732.5MHz_RB_6_0_NTNV



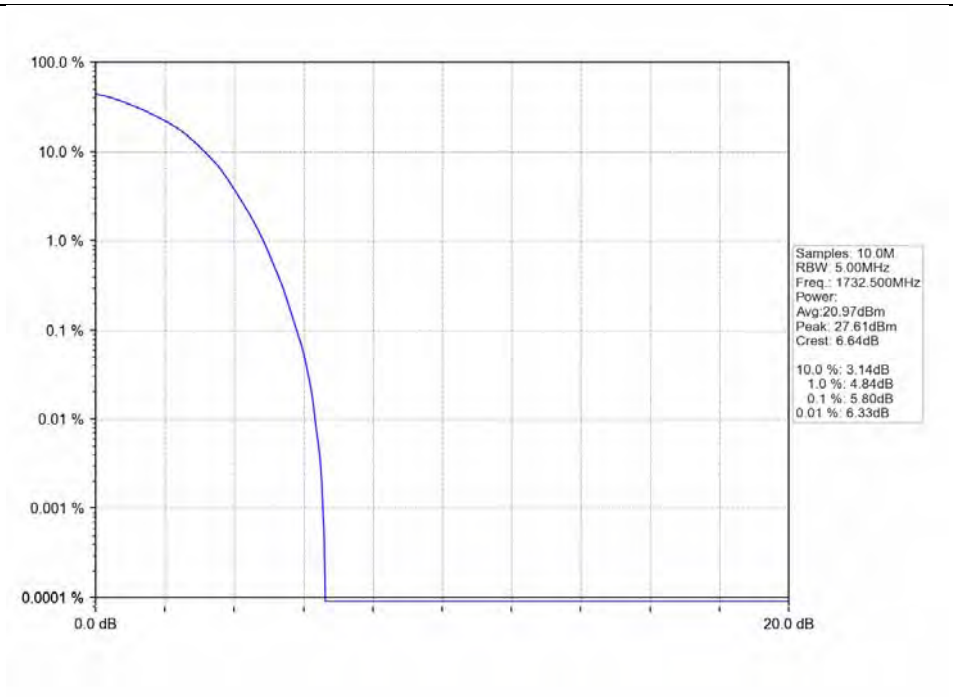
Band4_1.4MHz_16QAM_HCH_1754.3MHz_RB_6_0_NTNV



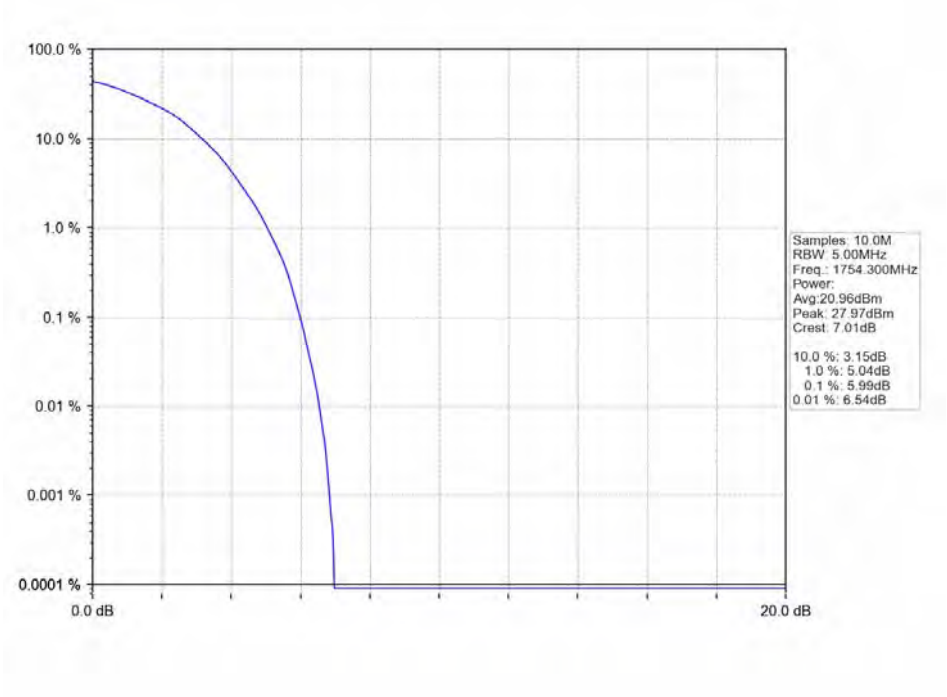
Band4_1.4MHz_64QAM_LCH_1710.7MHz_RB_6_0_NTNV



Band4_1.4MHz_64QAM_MCH_1732.5MHz_RB_6_0_NTNV



Band4_1.4MHz_64QAM_HCH_1754.3MHz_RB_6_0_NTNV

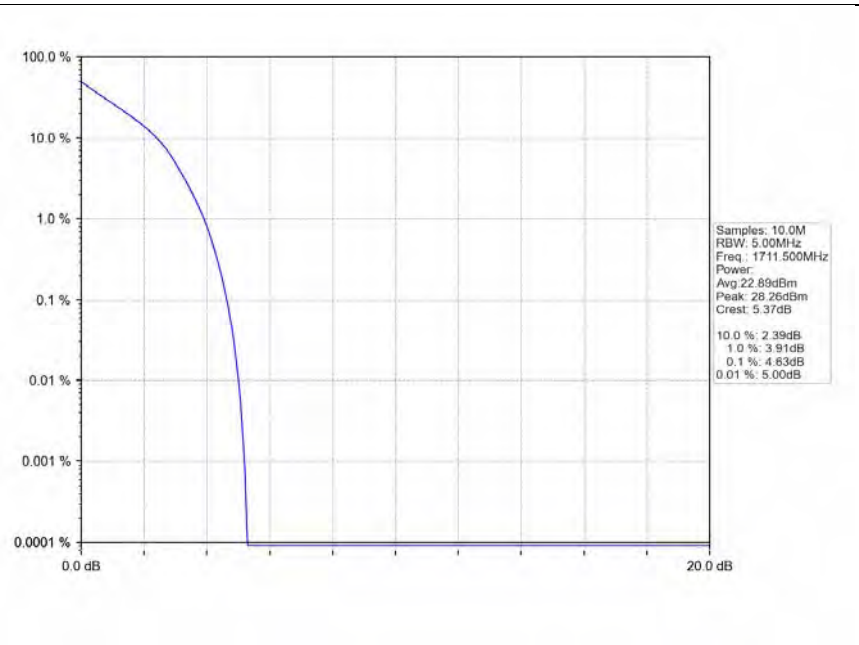
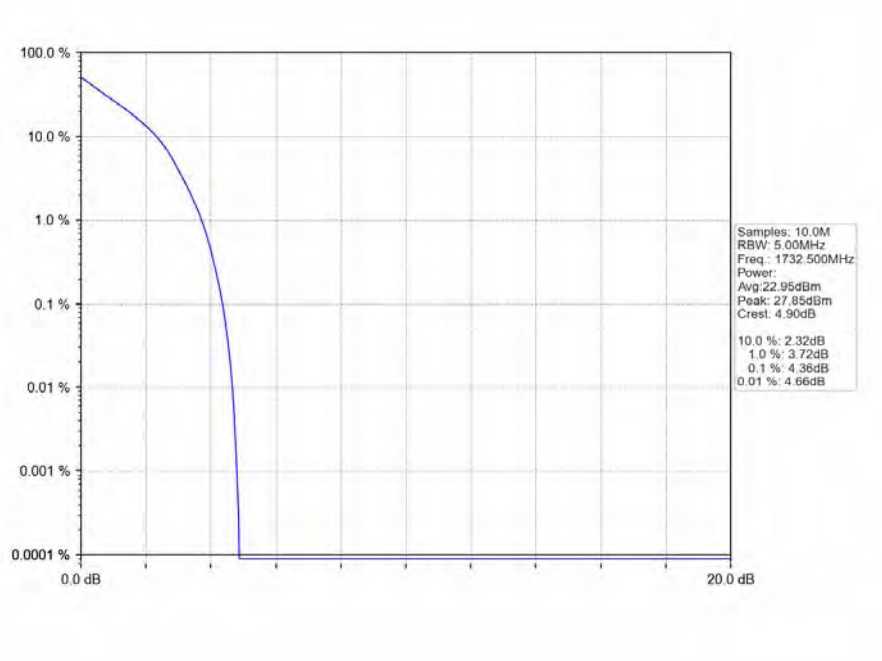


4.2 B4_3MHz

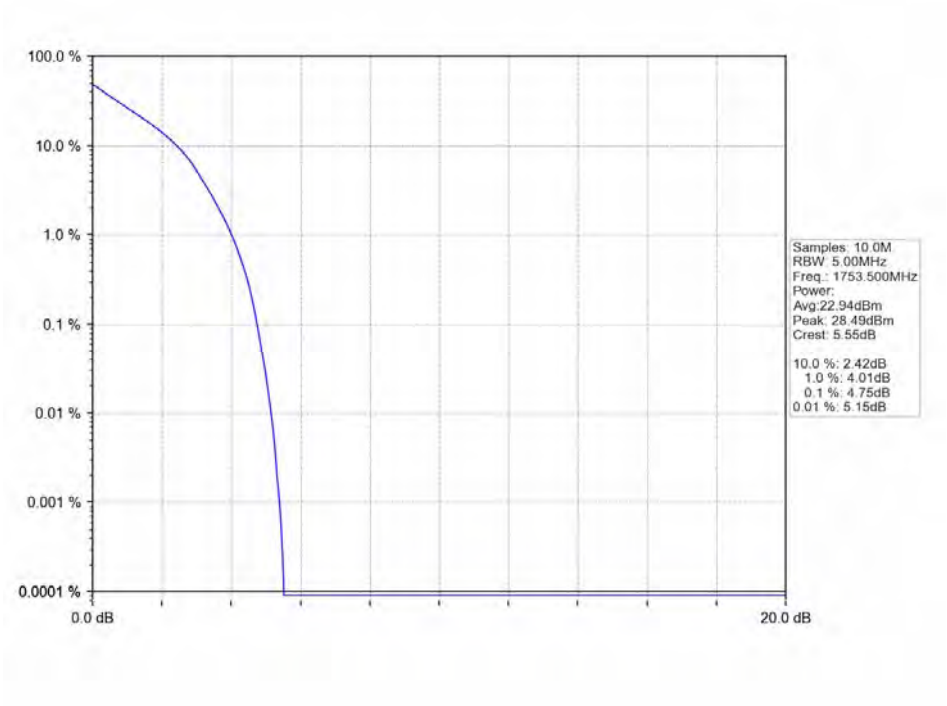
4.2.1 Test Result

Band: 4 / Bandwidth: 3MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	1711.5	15	0	4.63	<=13	Pass
	1732.5	15	0	4.36	<=13	Pass
	1753.5	15	0	4.75	<=13	Pass
16QAM	1711.5	15	0	5.46	<=13	Pass
	1732.5	15	0	5.27	<=13	Pass
	1753.5	15	0	5.59	<=13	Pass
64QAM	1711.5	15	0	5.97	<=13	Pass
	1732.5	15	0	5.74	<=13	Pass
	1753.5	15	0	6.15	<=13	Pass

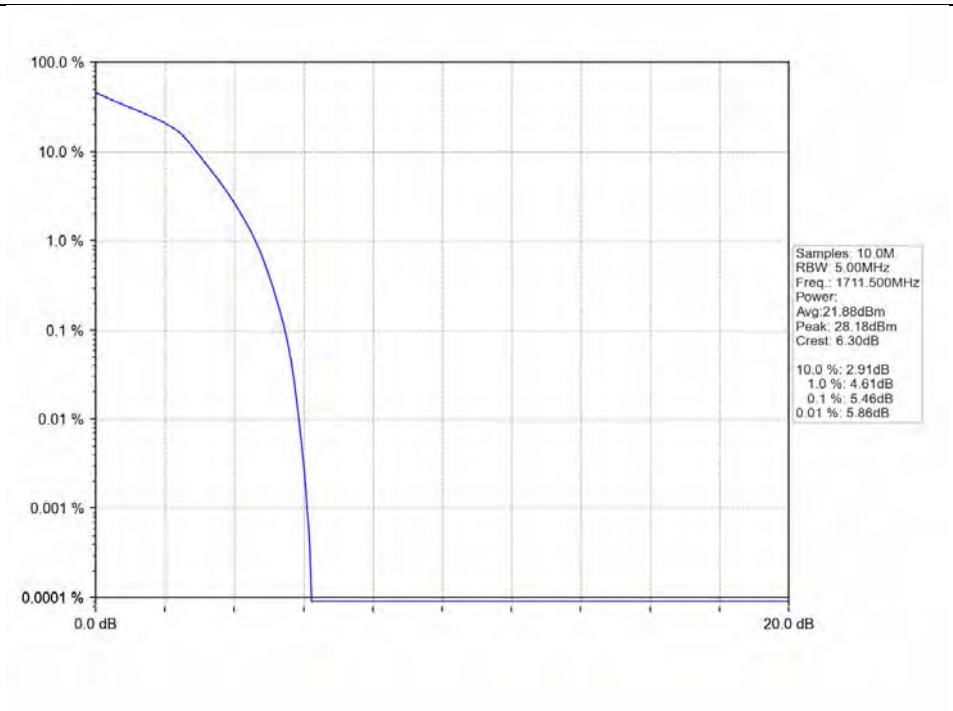
Test Graph

Band4_3MHz_QPSK_LCH_1711.5MHz_RB_15_0_NTNV

Band4_3MHz_QPSK_MCH_1732.5MHz_RB_15_0_NTNV


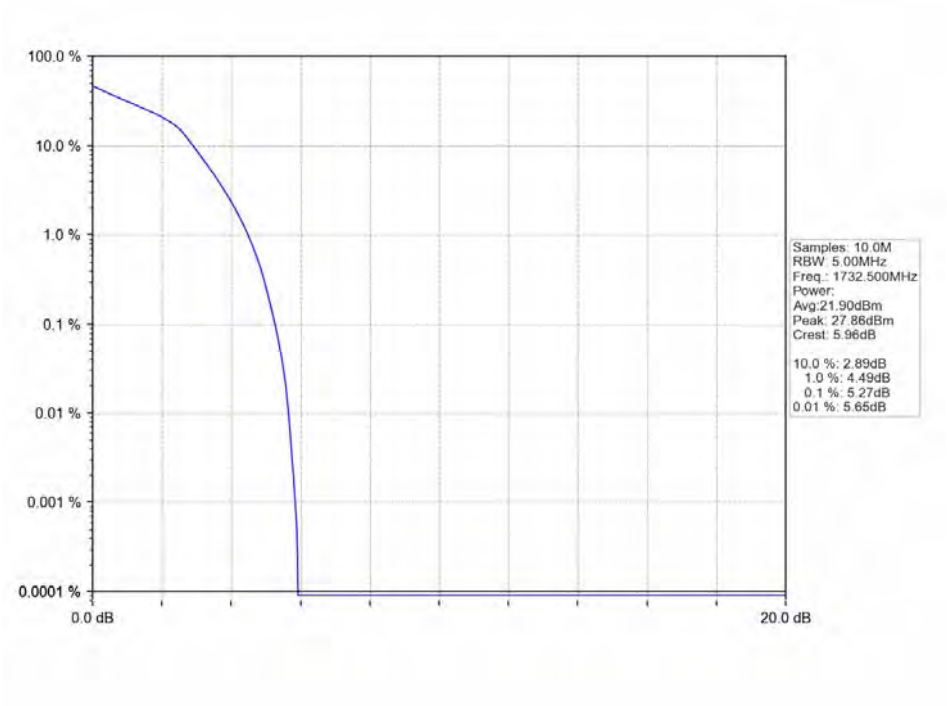
Band4_3MHz_QPSK_HCH_1753.5MHz_RB_15_0_NTNV



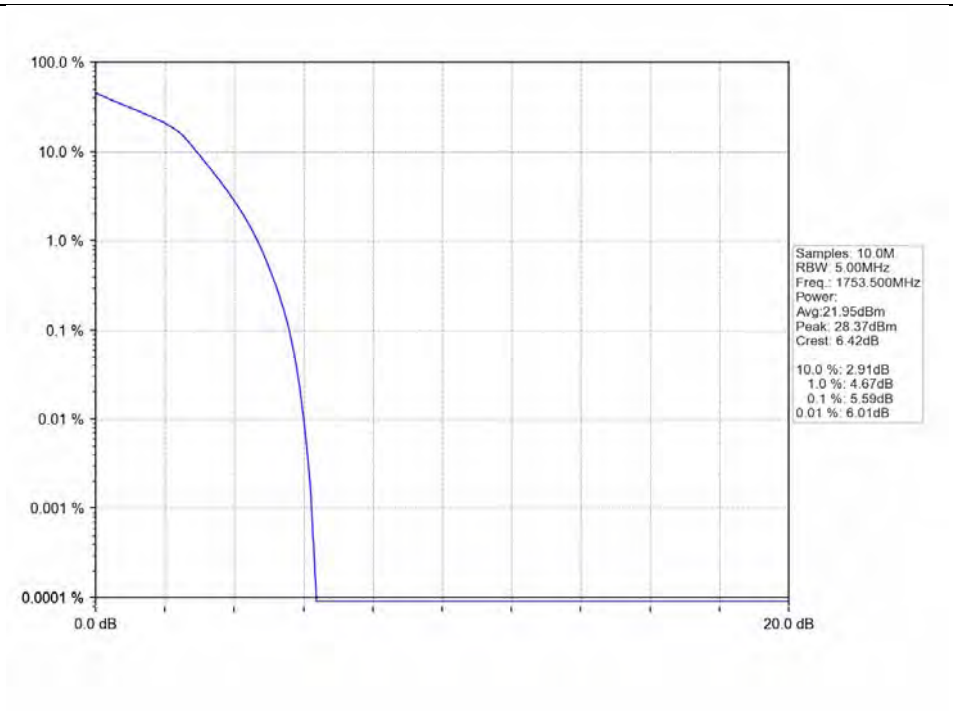
Band4_3MHz_16QAM_LCH_1711.5MHz_RB_15_0_NTNV



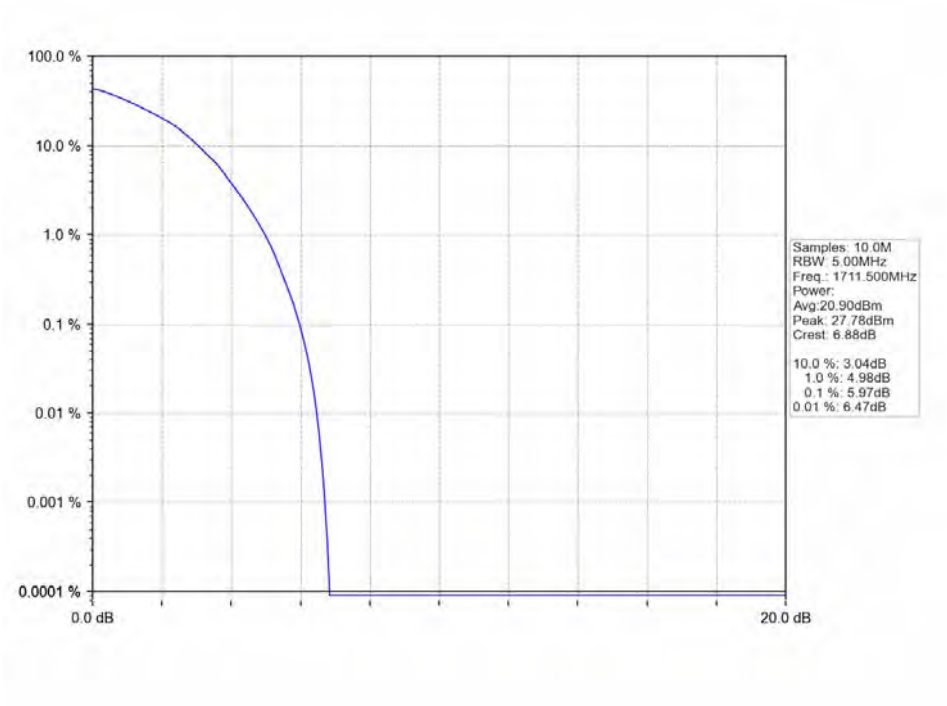
Band4_3MHz_16QAM_MCH_1732.5MHz_RB_15_0_NTNV



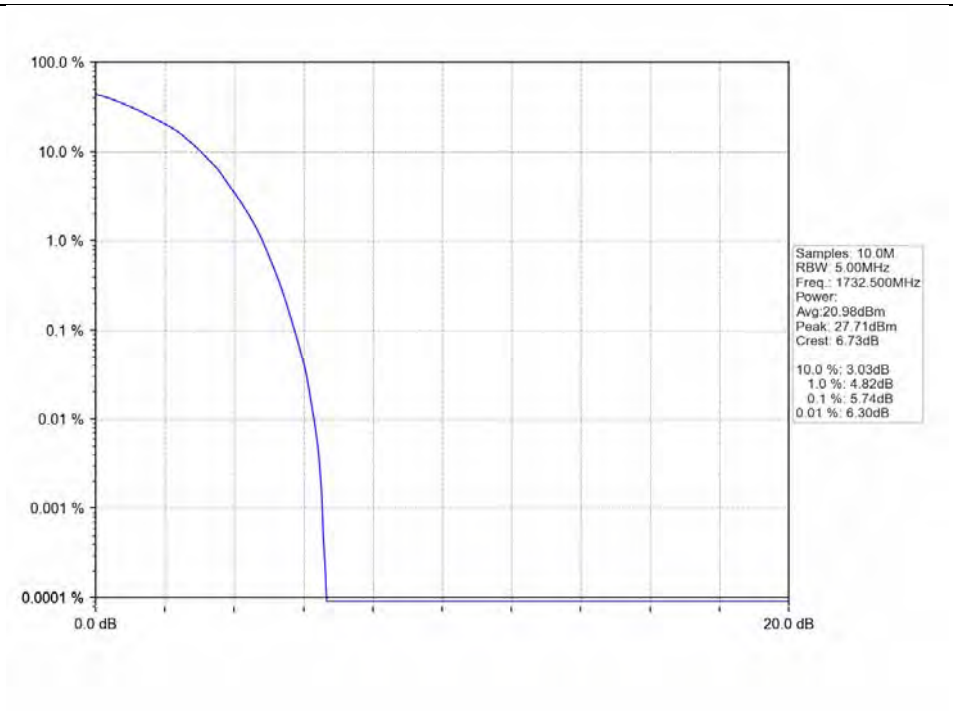
Band4_3MHz_16QAM_HCH_1753.5MHz_RB_15_0_NTNV



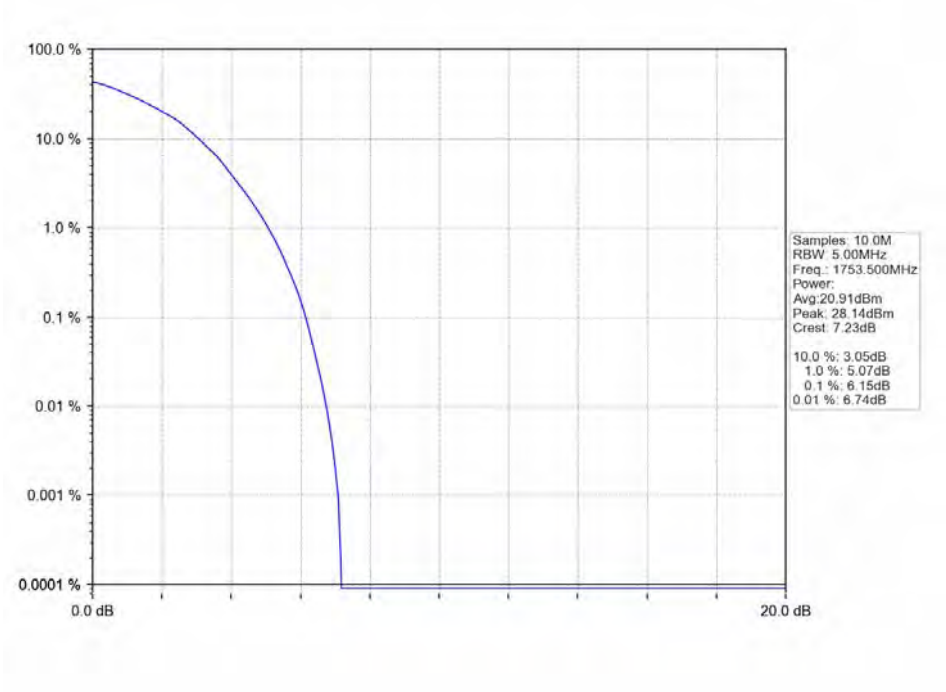
Band4_3MHz_64QAM_LCH_1711.5MHz_RB_15_0_NTNV



Band4_3MHz_64QAM_MCH_1732.5MHz_RB_15_0_NTNV



Band4_3MHz_64QAM_HCH_1753.5MHz_RB_15_0_NTNV

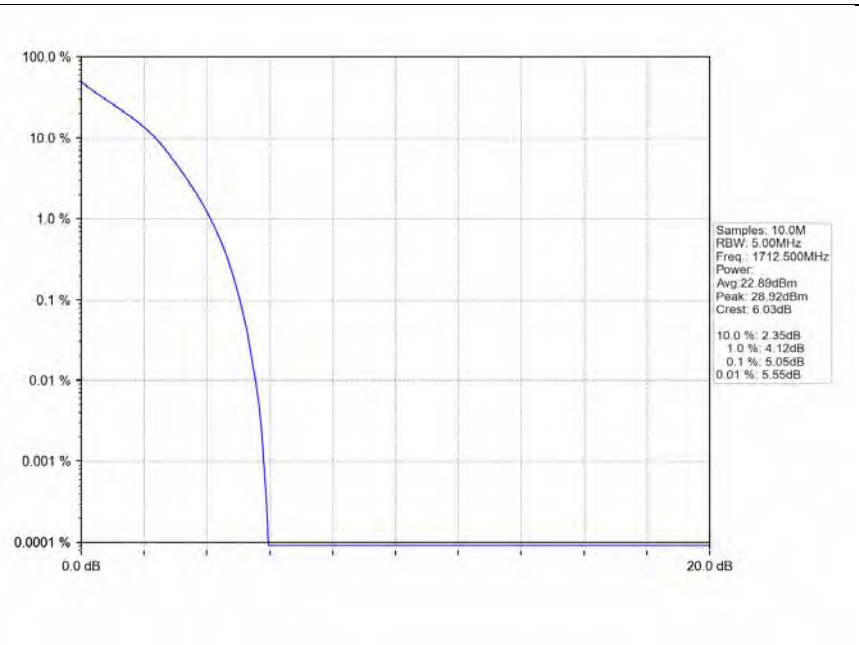
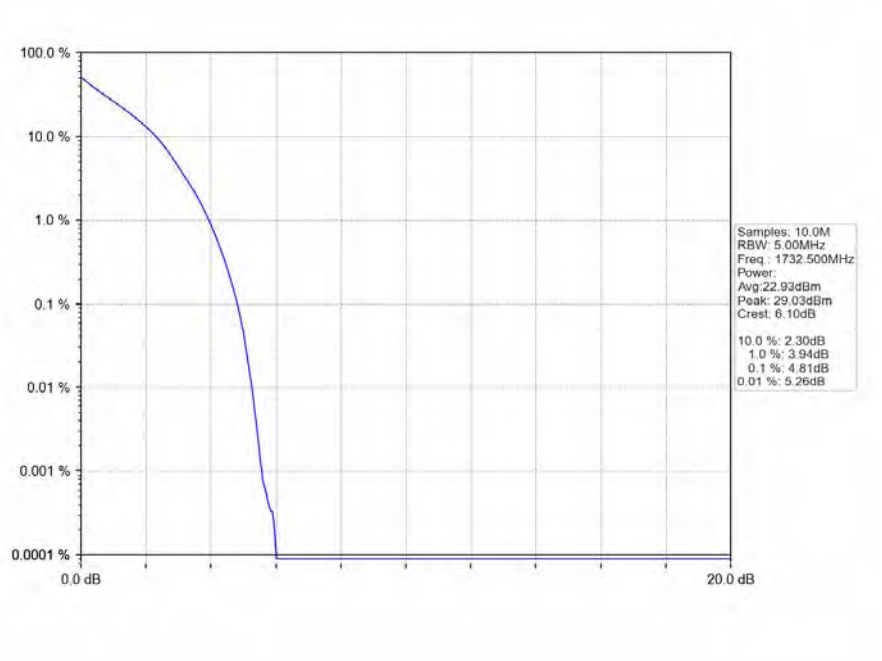


B4_5MHz

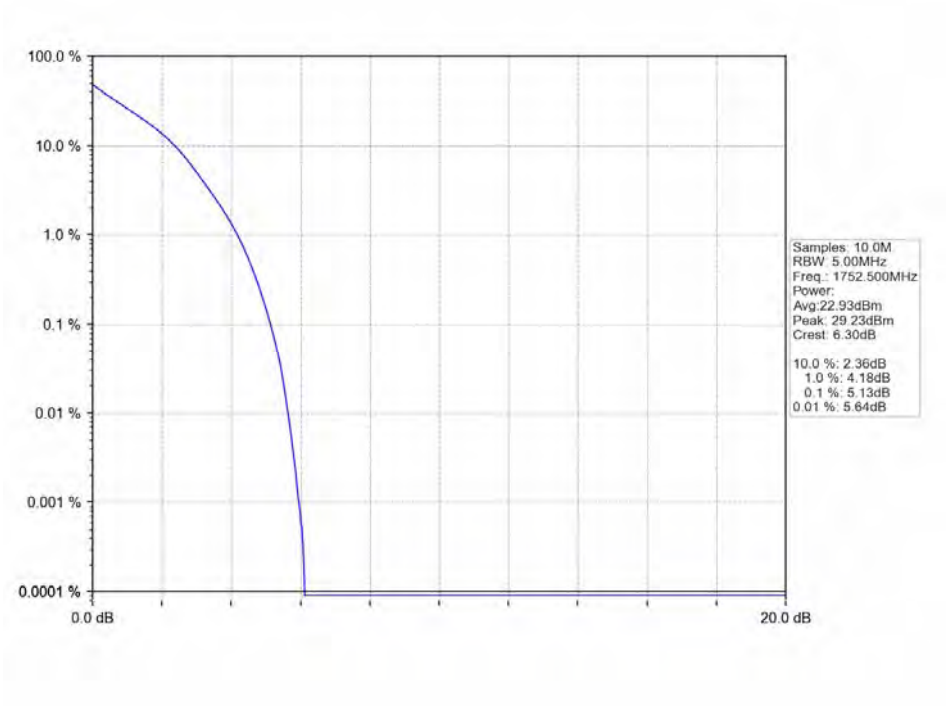
Test Result

Band: 4 / Bandwidth: 5MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	1712.5	25	0	5.05	<=13	Pass
	1732.5	25	0	4.81	<=13	Pass
	1752.5	25	0	5.13	<=13	Pass
16QAM	1712.5	25	0	5.75	<=13	Pass
	1732.5	25	0	5.54	<=13	Pass
	1752.5	25	0	5.89	<=13	Pass
64QAM	1712.5	25	0	6.11	<=13	Pass
	1732.5	25	0	5.98	<=13	Pass
	1752.5	25	0	6.24	<=13	Pass

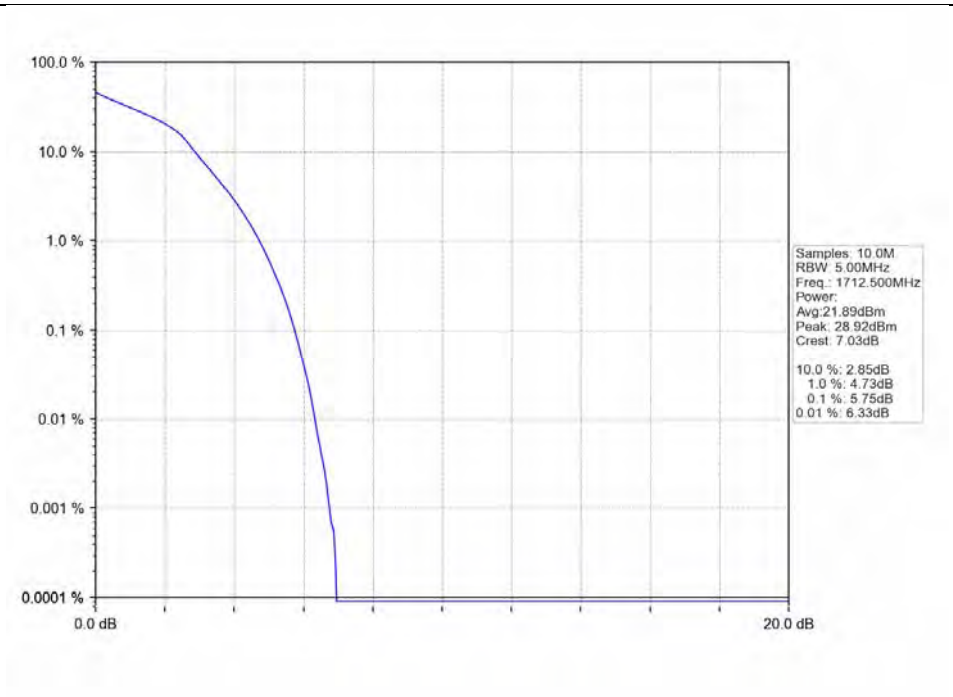
Test Graph

Band4_5MHz_QPSK_LCH_1712.5MHz_RB_25_0_NTNV

Band4_5MHz_QPSK_MCH_1732.5MHz_RB_25_0_NTNV


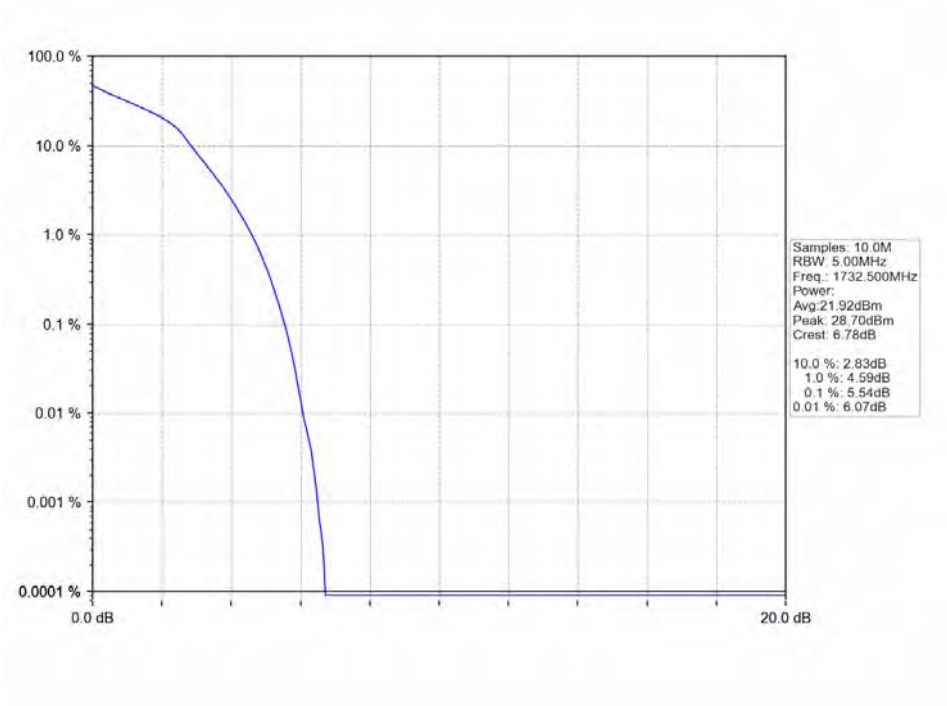
Band4_5MHz_QPSK_HCH_1752.5MHz_RB_25_0_NTNV



Band4_5MHz_16QAM_LCH_1712.5MHz_RB_25_0_NTNV



Band4_5MHz_16QAM_MCH_1732.5MHz_RB_25_0_NTNV



Band4_5MHz_16QAM_HCH_1752.5MHz_RB_25_0_NTNV