FCC Test Report

Product Name	:	Connectivity Module
Trade Name	:	Husqvarna
Model No.	:	HCM500
FCC ID	:	ZASHCM500

Applicant	:	HUSQVARNA AB
Address	:	561 82 HUSKVARNA Sweden

Date of Receipt	:	Dec. 22, 2020
Issued Date	:	Jun. 29, 2021
Report No.	:	20C0830R-E3042110012
Report Version	:	V1.0

Testing Laboratory
3024

The test results relate only to the samples tested.
The test report shall not be reproduced except in full without the written approval of DEKRA Testing and Certification Co., Ltd.

Test Report Certification

Issued Date : Jun. 29, 2021
Report No. : 20C0830R-E3042110012

Product Name	:	Connectivity Module
Applicant	:	HUSQVARNA AB
Address	:	561 82 HUSKVARNA Sweden
Manufacturer	:	HUSQVARNA AB
Address	:	561 82 HUSKVARNA Sweden
Model No.	:	HCM500
Trade name	:	Husqvarna
FCC ID	:	ZASHCM500
EUT Voltage	:	DC 6-58V
Testing Voltage	:	DC 48V
Applicable Standard	:	FCC CFR Title 47 Part 22 Subpart H FCC CFR Title 47 Part 24 Subpart E FCC CFR Title 47 Part 27 Subpart L, Subpart F FCC CFR Title 47 Part 90 Subpart S ANSI/TIA-603-E-2016
Test Lab	:	Hsin Chu Laboratory
Address	:	No.372-2, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County 310, Taiwan, R.O.C. TEL: +886-3-582-8001 / FAX: +886-3-582-8958
Test Result	:	Complied

Documented By :

(Demi Chang / Senior Engineering Adm. Specialist)

Tested By :

(Lion Wang / Senior Engineer)

Approved By :

(Louis Hsu / Deputy Manager)

Revision History

Version	Description	Issued Date
V1.0	Initial issue of report	Jun. 29, 2021

TABLE OF CONTENTS

Description		Page
1.	General Information	6
1.1.	EUT Description	6
1.2.	Mode of Operation	7
1.3.	Tested System Details	8
1.4.	Configuration of Tested System	9
1.5.	EUT Exercise Software	9
1.6.	Comments and Remarks	9
2.	Technical Test	10
2.1.	Summary of Test Result	10
2.2.	Test Environment	16
2.3.	List of Test Equipment	17
2.4.	Uncertainty	19
3.	RF Output Power	20
3.1.	Test Setup	20
3.2.	Test Procedure	20
3.3.	Test Method	20
3.4.	Test Result	21
4.	Occupied Bandwidth	42
4.1.	Test Setup	42
4.2.	Test Procedure	42
4.3.	Test Method	42
4.4.	Test Result	43
5.	Peak To Average Ratio	143
5.1.	Test Setup	143
5.2.	Test Procedure	143
5.3.	Test Method	143
5.4.	Limit	143
5.5.	Test Result	144
6.	Spurious Emissions	245
6.1.	Test Setup	245
6.2.	Test Procedure	246
6.3.	Test Method	246

6.4. Test Result 247
7. Spurious Emissions at Antenna Terminals 345
7.1. Test Setup 345
7.2. Test Procedure 345
7.3. Test Method 345
7.4. Test Result 346
8. Frequency Stability 408
8.1. Test Setup 408
8.2. Test Procedure 408
8.3. Test Method 408
8.4. Test Result 409
Attachment 1 445
Test Setup Photograph 445

1. General Information

1.1. EUT Description

Product Name	Connectivity Module
Trade Name	Husqvarna
Model No.	HCM500
Uplink Frequency Range (MHz)	LTE Band 2: 1850~1910 LTE Band 4: 1710~1755 LTE Band 5: 824~849 LTE Band 12: 699~716 LTE Band 13: 777~787 LTE Band 26: 814~849
Downlink Frequency Range (MHz)	LTE Band 2: 1930~1990 LTE Band 4: 2110~2155 LTE Band 5: 869~894 LTE Band 12: 729~746 LTE Band 13: 746~756 LTE Band 26: 859~894
Modulation	QPSK / 16QAM

Accessories Information	
Power Line (M5 - 5 pin)	Non-Shielded, 3.0m
Signal Cable (M8 - 8 pin)	Non-Shielded, 3.0m

Antenna Information	
Trande Name	TE
Model Name	2363696-5
Antenna Type	Dipole
Antenna Gain	0dBi (LTE Band 5/12/13/26) 2dBi (LTE Band 2/4)

Note:
1. This Connectivity Module support BT5.0, LTE Cat-M1 Band 2/4/5/12/13/26 & GSM functions.
2. Regards to the frequency band operation: the lowest, middle and highest frequency of channel were selected to perform the test, then shown on this report.
3. The EUT description is from the customer declaration.

1.2. Mode of Operation

DEKRA has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

Test Mode
Mode 1: Band2 Link
Mode 2: Band4 Link
Mode 3: Band5 Link
Mode 4: Band12 Link
Mode 5: Band13 Link
Mode 6: Band26_Part22 Link
Mode 7: Band26_Part90 Link

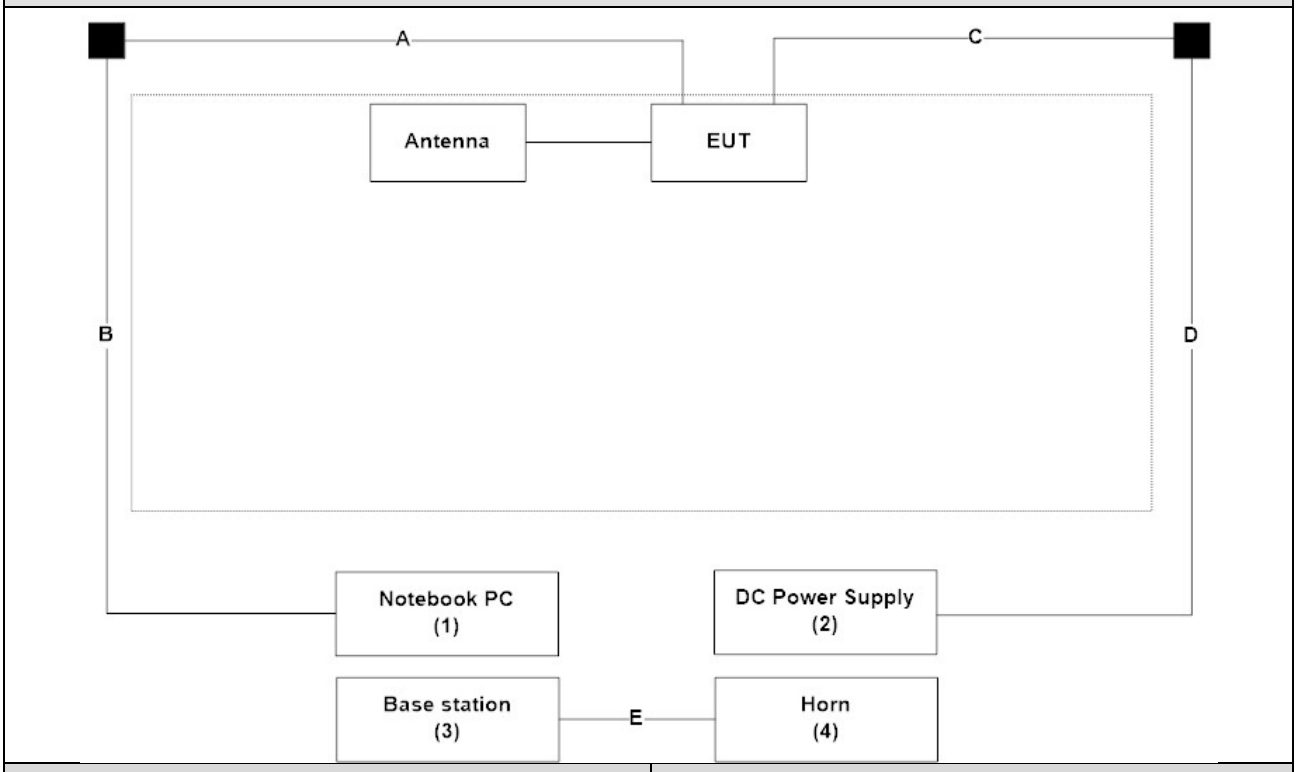
1.3. Tested System Details

The types for all equipment, plus descriptions of all cables used in the tested system (including inserted cards) are:

Product		Manufacturer	Model No.	Serial No.	FCC ID	Power Cord
1	Notebook PC	ASUS	E402S	GBN0CV14W050478	DoC	Shielded, 2m
2	DC Power Supply	Topward	6030D	809508	DoC	Non-Shielded, 1.8m
3	Base station (Cat-M1U)	R&S	CMW500	157118	DoC	Non-Shielded, 1.8m
4	Horn Antenna	Schwarzbeck	BBHA 9120D	1640	DoC	--

1.4. Configuration of Tested System

Connection Diagram



Signal Cable Type		Signal cable Description
A	UART Cable	Shielded, 5m
B	USB Cable	Shielded, 10m
C	DC Power Cable	Shielded, 3m
D	DC Power Cable	Non-Shielded, 6m
E	RF Cable	Shielded, 6m

1.5. EUT Exercise Software

1	Setup the EUT and simulators as shown on 1.4.
2	EUT is connected through the base station.
3	Configure test mode, test channel and data rate.
4	Let the EUT start sending or receiving continuously.
5	Verify that the device is working properly.

1.6. Comments and Remarks

The product specification and testing instructions for the EUT declared in the report are provided by the manufacturer who will take all responsibilities for the accuracy.

2. Technical Test

2.1. Summary of Test Result

☒ No deviations from the test standards

☐ Deviations from the test standards as below description:

B2

Uplink: 1850-1910MHz

Downlink: 1930-1990MHz

LTE B2			
FCC Part 24 Subpart E			
Industry Canada RSS-133, issue 6, Industry Canada RSS-GEN			
Test item	FCC Reference section	FCC Limit	Result
RF Output Power	§2.1033 §2.1046 §24.232	<2 Watts	Pass
Occupied Bandwidth	§2.1049	N/A	Pass
Peak-to-average power ratio	§24.232	<13 dB	Pass
Spurious Emissions	§2.1053 §24.238	<-13dBm	Pass
Spurious Emissions at Antenna Terminals	§27.238	<-13dBm	Pass
Frequency Stability	§2.1055 §24.235	<±2.5 ppm	Pass

Determining compliance shall be based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

B4

Uplink: 1710-1755MHz

Downlink: 2100-2155MHz

LTE B4			
FCC Part 27 Subpart L			
Industry Canada RSS-139, issue 3, Industry Canada RSS-GEN			
Test item	FCC Reference section	FCC Limit	Result
RF Output Power	§2.1033 §2.1046 §27.50	<1 Watt	Pass
Occupied Bandwidth	§2.1049	N/A	Pass
Peak-to-average power ratio	§27.50	<13 dB	Pass
Spurious Emissions	§2.1053 §27.53	<-13dBm	Pass
Spurious Emissions at Antenna Terminals	§27.53	<-13dBm	Pass
Frequency Stability	§2.1055 §27.54	<2.5 ppm	Pass

Determining compliance shall be based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

B5

Uplink: 824-849MHz

Downlink: 869-894MHz

LTE B5			
FCC Part 22 Subpart H			
Industry Canada RSS-132, issue 3, Industry Canada RSS-GEN			
Test item	FCC Reference section	FCC Limit	Result
RF Output Power	§2.1033 §2.1046 §22.913	<7 Watts	Pass
Occupied Bandwidth	§2.1049	N/A	Pass
Peak-to-average power ratio	§22.913	<13 dB	Pass
Spurious Emissions	§2.1053 §22.917	<-13dBm	Pass
Spurious Emissions at Antenna Terminals	§22.917	<-13dBm	Pass
Frequency Stability	§2.1055 §22.335	<±2.5 ppm	Pass

Determining compliance shall be based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

B12

Uplink: 699-716MHz

Downlink: 729-746MHz

LTE B12			
FCC Part 27 Subpart F			
Industry Canada RSS-130, issue 2, Industry Canada RSS-GEN			
Test item	FCC Reference section	FCC Limit	Result
RF Output Power	§2.1033 §2.1046 §27.50	<3 Watts ERP	Pass
Occupied Bandwidth	§2.1049	N/A	Pass
Peak-to-average power ratio	§27.50	<13 dB	Pass
Spurious Emissions	§2.1053 §27.53	<-13dBm	Pass
Spurious Emissions at Antenna Terminals	§27.53	<-13dBm	Pass
Frequency Stability	§2.1055 §27.54	<±2.5 ppm	Pass

Determining compliance shall be based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

B13

Uplink: 777-787MHz

Downlink: 746-756MHz

LTE B13			
FCC Part 27 Subpart F			
Industry Canada RSS-130, issue 2, Industry Canada RSS-GEN			
RF Output Power	FCC Reference section	FCC Limit	Result
RF Output Power	§2.1033 §2.1046 §27.50	<3 Watts ERP	Pass
Occupied Bandwidth	§2.1049	N/A	Pass
Peak-to-average power ratio	§27.50	<-13 dB	Pass
Spurious Emissions	§2.1053 §27.53	<-13dBm	Pass
Spurious Emissions at Antenna Terminals	§27.53	<-13dBm	Pass
Frequency Stability	§2.1055 §27.54	<±2.5 ppm	Pass

Determining compliance shall be based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

B26

Uplink: 814~849MHz (ISED not support 814~824 MHz)

Downlink: 859~894MHz

LTE B26			
FCC Part 22 Subpart H FCC Part 90 Subpart S			
Industry Canada RSS-132, issue 3, Industry Canada RSS-GEN			
Test item	FCC Reference section	FCC Limit	Result
RF Output Power	§2.1033 §2.1046 §90.635(b) §22.913	<100 Watts	Pass
Occupied Bandwidth	§2.1049	N/A	Pass
Peak-to-average power ratio	§22.913	<13 dB	Pass
Spurious Emissions	§2.1053 §90.691 §22.917	<-13dBm	Pass
Spurious Emissions at Antenna Terminals	§90.691 §22.917	<-13dBm	Pass
Frequency Stability	§2.1055 §90.213	<±2.5 ppm	Pass

Determining compliance shall be based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

2.2. Test Environment

Items	Required	Test Site
Temperature (°C)	15-35	1
Humidity (%RH)	25-75	

Note: Test site information refers to Laboratory Information.

Laboratory Information

USA	**:**	**FCC Registration Number: TW3024**
Canada	**:**	**IC Registration Number: 22397-1 / 22397-2 / 22397-3**

The address and introduction of DEKRA Testing and Certification Co., Ltd. laboratories can be founded in our Web site: http://www.dekra.com.tw

If you have any comments, please don't hesitate to contact us. Our test sites as below:

Test Laboratory	DEKRA Testing and Certification Co., Ltd.
Address	1. No.372, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County 31061, Taiwan, R.O.C. 2. No.372-2, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County 31061, Taiwan, R.O.C.
Phone number	1. +886-3-582-8001 2. +886-3-582-8001
Fax number	1. +886-3-582-8958 2. +886-3-582-8958
Email address	info.tw@dekra.com
Website	http://www.dekra.com.tw

2.3. List of Test Equipment

RF Output Power / SR12-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
EXA Signal Analyzer	Keysight	N9010A	MY51440132	2020/03/30	2021/03/29
Spectrum Analyzer	Keysight	N9030B	MY57140404	2020/06/03	2021/06/02
Spectrum Analyzer	Keysight	N9010B	MY57110159	2020/04/15	2021/04/14
Signal & Spectrum Analyzer	R&S	FSV40	101049	2020/03/30	2021/03/29
Wireless Conn. Tseter	R&S	CMW500	157118	2020/07/23	2021/07/22

Occupied Bandwidth / SR12-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
EXA Signal Analyzer	Keysight	N9010A	MY51440132	2020/03/30	2021/03/29
Spectrum Analyzer	Keysight	N9030B	MY57140404	2020/06/03	2021/06/02
Spectrum Analyzer	Keysight	N9010B	MY57110159	2020/04/15	2021/04/14
Signal & Spectrum Analyzer	R&S	FSV40	101049	2020/03/30	2021/03/29
Wireless Conn. Tseter	R&S	CMW500	157118	2020/07/23	2021/07/22

Peak To Average Ratio / SR12-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
EXA Signal Analyzer	Keysight	N9010A	MY51440132	2020/03/30	2021/03/29
Spectrum Analyzer	Keysight	N9030B	MY57140404	2020/06/03	2021/06/02
Spectrum Analyzer	Keysight	N9010B	MY57110159	2020/04/15	2021/04/14
Signal & Spectrum Analyzer	R&S	FSV40	101049	2020/03/30	2021/03/29
Wireless Conn. Tseter	R&S	CMW500	157118	2020/07/23	2021/07/22

Conducted Band Edge / SR12-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
EXA Signal Analyzer	Keysight	N9010A	MY51440132	2020/03/30	2021/03/29
Spectrum Analyzer	Keysight	N9030B	MY57140404	2020/06/03	2021/06/02
Spectrum Analyzer	Keysight	N9010B	MY57110159	2020/04/15	2021/04/14
Signal & Spectrum Analyzer	R&S	FSV40	101049	2020/03/30	2021/03/29
Wireless Conn. Tseter	R&S	CMW500	157118	2020/07/23	2021/07/22

Conducted Spurious Emissions / SR12-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
EXA Signal Analyzer	Keysight	N9010A	MY51440132	2020/03/30	2021/03/29
Spectrum Analyzer	Keysight	N9030B	MY57140404	2020/06/03	2021/06/02
Spectrum Analyzer	Keysight	N9010B	MY57110159	2020/04/15	2021/04/14
Signal & Spectrum Analyzer	R&S	FSV40	101049	2020/03/30	2021/03/29
Wireless Conn. Tseter	R&S	CMW500	157118	2020/07/23	2021/07/22

Radiated Spurious Emissions / CB2-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Signal Analyzer	R&S	FSVA40	101455	2020/10/12	2021/10/11
Signal & Spectrum Analyzer	R&S	FSV40	101049	2020/03/30 2021/03/31	2021/03/29 2022/03/30
Signal Analyzer	R&S	FSVA40	101435	2020/06/24	2021/06/23
EXA Signal Analyzer	Keysight	N9010A	MY51440132	2020/03/30 2021/03/31	2021/03/29 2022/03/30
Bilog Antenna	Teseq	CBL6112D	23191	2020/06/12 2021/06/26	2021/06/11 2022/02/25
Horn Antenna	Schwarzbeck	BBHA 9120D	639	2020/06/04	2021/06/03
Horn Antenna	Schwarzbeck	BBHA 9170	202	2020/12/16	2021/12/15
Pre-Amplifier	EMCI	EMC01820I	980365	2020/06/19	2021/06/18
Pre-Amplifier	EMEC	EM01G18GA	060741	2020/07/24	2021/07/23
Pre-Amplifier	DEKRA	AP-400C	201801231	2020/11/16	2021/11/15
Wideband Radio Communication Tester	R&S	CMW500	106071	2021/01/27	2022/01/26
Wireless Conn. Tseter	R&S	CMW500	157118	2020/07/23	2021/07/22
Coaxial Cable(13m)	Huber+Suhner	SF104	CB2-H	2020/07/25	2021/07/24
DEKRA Testing System	DEKRA	Version 2.0	CB2-H	NA	NA

Spurious Emissions at Antenna Terminals / SR12-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
EXA Signal Analyzer	Keysight	N9010A	MY51440132	2020/03/30	2021/03/29
Spectrum Analyzer	Keysight	N9030B	MY57140404	2020/06/03	2021/06/02
Spectrum Analyzer	Keysight	N9010B	MY57110159	2020/04/15	2021/04/14
Signal & Spectrum Analyzer	R&S	FSV40	101049	2020/03/30	2021/03/29
Wireless Conn. Tseter	R&S	CMW500	157118	2020/07/23	2021/07/22
Wideband Radio Communication Tester	R&S	CMW500	106071	2020/02/03	2021/02/02

Frequency Stability / SR12-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
EXA Signal Analyzer	Keysight	N9010A	MY51440132	2020/03/30	2021/03/29
Spectrum Analyzer	Keysight	N9030B	MY57140404	2020/06/03	2021/06/02
Spectrum Analyzer	Keysight	N9010B	MY57110159	2020/04/15	2021/04/14
Signal & Spectrum Analyzer	R&S	FSV40	101049	2020/03/30	2021/03/29
Wireless Conn. Tseter	R&S	CMW500	157118	2020/07/23	2021/07/22

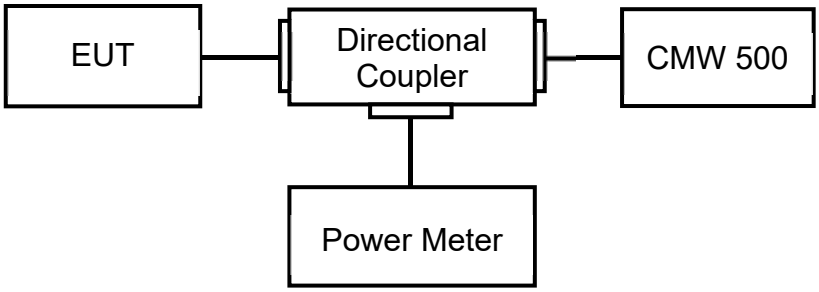
Note: All equipment upon which need to calibrated are with calibration period of 1 year.

2.4. Uncertainty

Test Item	Uncertainty
RF Output Power	±1.27 dB
Occupied Bandwidth	± 10 Hz
Peak To Average Ratio	Not exceed 13 dB
Spurious Emissions	± 1.27 dB for Conducted Measurement ± 3.2 dB for Radiated Measurement
Spurious Emissions at Antenna Terminals	± 3.2 dB
Frequency Stability	± 10 Hz

3. RF Output Power

3.1. Test Setup



3.2. Test Procedure

a) The RF output of the transmitter was connected to base station simulator.
b) The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
c) Set EUT at maximum average power by base station simulator.
d) Measure lowest, middle, and highest channels for each bandwidth and different modulation.

Effective Isotropic Radiated Power = Conducted Power(dBm) + Antenna Gain(dBi)
Effective Radiated Power = Conducted Power(dBm) + Antenna Gain(dBi) - 2.15dB
The conversion of dBm to watts is given by the formula:

$$P_{(W)} = 1W \times \frac{10^{\left(\frac{P_{(dBm)}}{10}\right)}}{1000} = 10^{((P_{(dBm)}-30)/10)}$$

3.3. Test Method

KDB 971168 D01 Power Meas License Digital Systems v03 sub-clause 5.2.4
ANSI C63.26: 2015 Sub-clause 5.2.4.2

3.4. Test Result

Product	Connectivity Module		
Test Item	RF Output Power		
Test Mode	Mode 1: Band2 Link		
Date of Test	2021/01/08	Test Site	SR12-H
Temperature (°C)	23	Humidity (%RH)	61

Band	Channel Freq. (MHz)	Modulation	RB No.	RB offset	NB Position	Conducted Output Power (dBm)	RF Output Power (W) EIRP	Limit (W) EIRP
Band 2 1.4MHz	18607 1850.7	QPSK	1	0	Low	22.43	0.277	2
			6	0		20.59	0.182	2
		16-QAM	1	0		22.01	0.252	2
			5	0		20.77	0.189	2
	18900 1880	QPSK	1	0		22.42	0.277	2
			6	0		20.50	0.178	2
		16-QAM	1	0		21.83	0.242	2
			5	0		20.46	0.176	2
	19193 1909.3	QPSK	1	5	Low	22.66	0.292	2
			6	0		20.40	0.174	2
		16-QAM	1	5		21.84	0.242	2
			5	1		20.57	0.181	2

Band	Channel Freq. (MHz)	Modulation	RB No.	RB offset	NB Position	Conducted Output Power (dBm)	RF Output Power (W) EIRP	Limit (W) EIRP
Band 2 3MHz	18615 1851.5	QPSK	1	0	Low	22.74	0.298	2
			6	0		20.54	0.179	2
		16-QAM	1	0		21.83	0.242	2
			5	0		20.61	0.182	2
	18900 1880	QPSK	1	0		22.81	0.303	2
			6	0		20.55	0.180	2
		16-QAM	1	0		21.68	0.233	2
			5	0		20.70	0.186	2
	19185 1908.5	QPSK	1	5	High	22.53	0.284	2
			6	0		20.38	0.173	2
		16-QAM	1	5		21.49	0.223	2
			5	1		20.47	0.177	2

Band	Channel Freq. (MHz)	Modulation	RB No.	RB offset	NB Position	Conducted Output Power (dBm)	RF Output Power (W) EIRP	Limit (W) EIRP
Band 2 5MHz	18625 1852.5	QPSK	1	0	Low	22.74	0.298	2
			6	0		21.71	0.235	2
		16-QAM	1	0		22.53	0.284	2
			5	0		20.79	0.190	2
	18900 1880	QPSK	1	0		22.80	0.302	2
			6	0		21.57	0.228	2
		16-QAM	1	0		22.42	0.277	2
			5	0		20.53	0.179	2
	19175 1907.5	QPSK	1	5	High	22.66	0.292	2
			6	0		21.59	0.229	2
		16-QAM	1	5		22.58	0.287	2
			5	1		20.56	0.180	2

Band	Channel Freq. (MHz)	Modulation	RB No.	RB offset	NB Position	Conducted Output Power (dBm)	RF Output Power (W) EIRP	Limit (W) EIRP
Band 2 10MHz	18650 1855	QPSK	1	0	Low	22.78	0.301	2
			6	0		21.67	0.233	2
		16-QAM	1	0		22.52	0.283	2
			5	0		21.76	0.238	2
	18900 1880	QPSK	1	0		22.90	0.309	2
			6	0		21.76	0.238	2
		16-QAM	1	0		22.52	0.283	2
			5	0		21.80	0.240	2
	19150 1905	QPSK	1	5	High	22.71	0.296	2
			6	0		21.40	0.219	2
		16-QAM	1	5		22.33	0.271	2
			5	1		21.30	0.214	2

Band	Channel Freq. (MHz)	Modulation	RB No.	RB offset	NB Position	Conducted Output Power (dBm)	RF Output Power (W) EIRP	Limit (W) EIRP
Band 2 15MHz	18675 1857.5	QPSK	1	0	Low	22.80	0.302	2
			6	0		22.74	0.298	2
		16-QAM	1	0		22.67	0.293	2
			5	0		22.54	0.284	2
	18900 1880	QPSK	1	0		22.72	0.296	2
			6	0		22.75	0.299	2
		16-QAM	1	0		22.49	0.281	2
			5	0		22.64	0.291	2
	19125 1902.5	QPSK	1	5	High	22.69	0.294	2
			6	0		22.59	0.288	2
		16-QAM	1	5		22.33	0.271	2
			5	1		22.61	0.289	2

Band	Channel Freq. (MHz)	Modulation	RB No.	RB offset	NB Position	Conducted Output Power (dBm)	RF Output Power (W) EIRP	Limit (W) EIRP
Band 2 20MHz	18700 1860	QPSK	1	0	Low	22.94	0.312	2
			6	0		22.69	0.294	2
		16-QAM	1	0		22.39	0.275	2
			5	0		22.68	0.294	2
	18900 1880	QPSK	1	0		22.98	0.315	2
			6	0		22.62	0.290	2
		16-QAM	1	0		22.76	0.299	2
			5	0		22.73	0.297	2
	19100 1900	QPSK	1	5	High	22.73	0.297	2
			6	0		22.47	0.280	2
		16-QAM	1	5		22.72	0.296	2
			5	1		22.54	0.284	2

Product	Connectivity Module		
Test Item	RF Output Power		
Test Mode	Mode 2: Band4 Link		
Date of Test	2021/01/08	Test Site	SR12-H
Temperature (°C)	23	Humidity (%RH)	61

Band	Channel Freq. (MHz)	Modulation	RB No.	RB offset	NB Position	Conducted Output Power (dBm)	RF Output Power (W) EIRP	Limit (W) EIRP
Band 4 1.4MHz	19957 1710.7	QPSK	1	0	Low	22.55	0.285	1
			6	0		20.54	0.179	1
		16-QAM	1	0		21.86	0.243	1
			5	0		20.92	0.196	1
	20175 1732.5	QPSK	1	0		22.86	0.306	1
			6	0		20.79	0.190	1
		16-QAM	1	0		21.94	0.248	1
			5	0		20.65	0.184	1
	20393 1754.3	QPSK	1	5	Low	22.80	0.302	1
			6	0		20.62	0.183	1
		16-QAM	1	5		21.77	0.238	1
			5	1		20.75	0.188	1

Band	Channel Freq. (MHz)	Modulation	RB No.	RB offset	NB Position	Conducted Output Power (dBm)	RF Output Power (W) EIRP	Limit (W) EIRP
Band 4 3MHz	19965 1711.5	QPSK	1	0	Low	22.83	0.304	1
			6	0		20.87	0.194	1
		16-QAM	1	0		21.77	0.238	1
			5	0		20.83	0.192	1
	20175 1732.5	QPSK	1	0		22.84	0.305	1
			6	0		20.78	0.190	1
		16-QAM	1	0		22.00	0.251	1
			5	0		20.85	0.193	1
	20385 1753.5	QPSK	1	5	High	22.70	0.295	1
			6	0		20.66	0.185	1
		16-QAM	1	5		22.19	0.262	1
			5	1		20.88	0.194	1

Band	Channel Freq. (MHz)	Modulation	RB No.	RB offset	NB Position	Conducted Output Power (dBm)	RF Output Power (W) EIRP	Limit (W) EIRP
Band 4 5MHz	19975 1712.5	QPSK	1	0	Low	22.76	0.299	1
			6	0		21.69	0.234	1
		16-QAM	1	0		22.85	0.305	1
			5	0		20.85	0.193	1
	20175 1732.5	QPSK	1	0		22.77	0.300	1
			6	0		21.65	0.232	1
		16-QAM	1	0		22.29	0.269	1
			5	0		20.45	0.176	1
	20375 1752.5	QPSK	1	5	High	22.62	0.290	1
			6	0		21.61	0.230	1
		16-QAM	1	5		22.34	0.272	1
			5	1		20.70	0.186	1

Band	Channel Freq. (MHz)	Modulation	RB No.	RB offset	NB Position	Conducted Output Power (dBm)	RF Output Power (W) EIRP	Limit (W) EIRP
Band 4 10MHz	20000 1715	QPSK	1	0	Low	22.93	0.311	1
			6	0		21.69	0.234	1
		16-QAM	1	0		22.54	0.284	1
			5	0		21.56	0.227	1
	20175 1732.5	QPSK	1	0		22.88	0.308	1
			6	0		21.67	0.233	1
		16-QAM	1	0		22.54	0.284	1
			5	0		21.88	0.244	1
	20350 1750	QPSK	1	5	High	22.73	0.297	1
			6	0		21.52	0.225	1
		16-QAM	1	5		22.71	0.296	1
			5	1		21.61	0.230	1

Band	Channel Freq. (MHz)	Modulation	RB No.	RB offset	NB Position	Conducted Output Power (dBm)	RF Output Power (W) EIRP	Limit (W) EIRP
Band 4 15MHz	20025 1717.5	QPSK	1	0	Low	22.54	0.284	1
			6	0		22.91	0.310	1
		16-QAM	1	0		22.69	0.294	1
			5	0		22.39	0.275	1
	20175 1732.5	QPSK	1	0		22.82	0.303	1
			6	0		22.66	0.292	1
		16-QAM	1	0		22.80	0.302	1
			5	0		22.75	0.299	1
	20325 1747.5	QPSK	1	5	High	22.54	0.284	1
			6	0		22.71	0.296	1
		16-QAM	1	5		22.55	0.285	1
			5	1		22.48	0.281	1

Band	Channel Freq. (MHz)	Modulation	RB No.	RB offset	NB Position	Conducted Output Power (dBm)	RF Output Power (W) EIRP	Limit (W) EIRP
Band 4 20MHz	20050 1720	QPSK	1	0	Low	22.88	0.308	1
			6	0		22.64	0.291	1
		16-QAM	1	0		22.70	0.295	1
			5	0		22.79	0.301	1
	20175 1732.5	QPSK	1	0		23.00	0.316	1
			6	0		22.80	0.302	1
		16-QAM	1	0		22.81	0.303	1
			5	0		22.76	0.299	1
	20300 1745	QPSK	1	5	High	22.84	0.305	1
			6	0		22.48	0.281	1
		16-QAM	1	5		22.32	0.270	1
			5	1		22.64	0.291	1

Product	Connectivity Module		
Test Item	RF Output Power		
Test Mode	Mode 3: Band5 Link		
Date of Test	2021/01/08	Test Site	SR12-H
Temperature (°C)	23	Humidity (%RH)	61

Band	Channel Freq. (MHz)	Modulation	RB No.	RB offset	NB Position	Conducted Output Power (dBm)	RF Output Power (W) ERP	Limit (W) ERP
Band 5 1.4MHz	20407 824.7	QPSK	1	0	Low	23.07	0.124	7
			6	0		21.06	0.078	7
		16-QAM	1	0		22.28	0.103	7
			5	0		21.21	0.081	7
	20525 836.5	QPSK	1	0		23.04	0.123	7
			6	0		21.09	0.078	7
		16-QAM	1	0		22.15	0.100	7
			5	0		21.10	0.079	7
	20643 848.3	QPSK	1	5	Low	23.05	0.123	7
			6	0		21.06	0.078	7
		16-QAM	1	5		22.24	0.102	7
			5	1		21.30	0.082	7

Band	Channel Freq. (MHz)	Modulation	RB No.	RB offset	NB Position	Conducted Output Power (dBm)	RF Output Power (W) ERP	Limit (W) ERP
Band 5 3MHz	20415 825.5	QPSK	1	0	Low	23.19	0.127	7
			6	0		21.15	0.079	7
		16-QAM	1	0		22.34	0.104	7
			5	0		21.26	0.081	7
	20525 836.5	QPSK	1	0		23.04	0.123	7
			6	0		21.16	0.080	7
		16-QAM	1	0		22.51	0.109	7
			5	0		21.16	0.080	7
	20635 847.5	QPSK	1	5	High	23.10	0.124	7
			6	0		21.03	0.077	7
		16-QAM	1	5		22.58	0.110	7
			5	1		21.17	0.080	7

Band	Channel Freq. (MHz)	Modulation	RB No.	RB offset	NB Position	Conducted Output Power (dBm)	RF Output Power (W) ERP	Limit (W) ERP
Band 5 5MHz	20425 826.5	QPSK	1	0	Low	23.22	0.128	7
			6	0		22.05	0.098	7
		16-QAM	1	0		22.99	0.121	7
			5	0		20.92	0.075	7
	20525 836.5	QPSK	1	0		23.23	0.128	7
			6	0		22.19	0.101	7
		16-QAM	1	0		23.04	0.123	7
			5	0		21.31	0.082	7
	20625 846.5	QPSK	1	5	High	23.16	0.126	7
			6	0		22.09	0.099	7
		16-QAM	1	5		23.02	0.122	7
			5	1		21.09	0.078	7

Band	Channel Freq. (MHz)	Modulation	RB No.	RB offset	NB Position	Conducted Output Power (dBm)	RF Output Power (W) ERP	Limit (W) ERP
Band 5 10MHz	20450 829	QPSK	1	0	Low	23.16	0.126	7
			6	0		22.14	0.100	7
		16-QAM	1	0		22.98	0.121	7
			5	0		22.35	0.105	7
	20525 836.5	QPSK	1	0		23.27	0.129	7
			6	0		22.20	0.101	7
		16-QAM	1	0		23.19	0.127	7
			5	0		21.95	0.095	7
	20600 844	QPSK	1	5	High	23.27	0.129	7
			6	0		22.23	0.102	7
		16-QAM	1	5		23.13	0.125	7
			5	1		22.31	0.104	7

Product	Connectivity Module		
Test Item	RF Output Power		
Test Mode	Mode 4: Band12 Link		
Date of Test	2021/01/08	Test Site	SR12-H
Temperature (°C)	23	Humidity (%RH)	61

Band	Channel Freq. (MHz)	Modulation	RB No.	RB offset	NB Position	Conducted Output Power (dBm)	RF Output Power (W) ERP	Limit (W) ERP
Band 12 1.4MHz	23017 699.7	QPSK	1	0	Low	23.24	0.129	3
			6	0		21.26	0.081	3
		16-QAM	1	0		22.79	0.116	3
			5	0		21.36	0.083	3
	23095 707.5	QPSK	1	0		22.89	0.119	3
			6	0		21.15	0.079	3
		16-QAM	1	0		22.36	0.105	3
			5	0		21.04	0.077	3
	23173 715.3	QPSK	1	5	Low	23.15	0.126	3
			6	0		21.28	0.082	3
		16-QAM	1	5		22.29	0.103	3
			5	1		21.26	0.081	3

Band	Channel Freq. (MHz)	Modulation	RB No.	RB offset	NB Position	Conducted Output Power (dBm)	RF Output Power (W) ERP	Limit (W) ERP
Band 12 3MHz	23025 700.5	QPSK	1	0	Low	23.24	0.129	3
			6	0		21.30	0.082	3
		16-QAM	1	0		22.28	0.103	3
			5	0		21.35	0.083	3
	23095 707.5	QPSK	1	0		23.15	0.126	3
			6	0		21.07	0.078	3
		16-QAM	1	0		22.27	0.103	3
			5	0		21.27	0.082	3
	23165 714.5	QPSK	1	5	High	22.99	0.121	3
			6	0		20.94	0.076	3
		16-QAM	1	5		22.44	0.107	3
			5	1		21.09	0.078	3

Band	Channel Freq. (MHz)	Modulation	RB No.	RB offset	NB Position	Conducted Output Power (dBm)	RF Output Power (W) ERP	Limit (W) ERP
Band 2 5MHz	23035 701.5	QPSK	1	0	Low	23.25	0.129	3
			6	0		22.38	0.105	3
		16-QAM	1	0		23.12	0.125	3
			5	0		21.40	0.084	3
	23095 707.5	QPSK	1	0		23.29	0.130	3
			6	0		22.32	0.104	3
		16-QAM	1	0		23.14	0.126	3
			5	0		21.32	0.083	3
	23155 713.5	QPSK	1	5	High	23.22	0.128	3
			6	0		22.14	0.100	3
		16-QAM	1	5		23.12	0.125	3
			5	1		21.33	0.083	3

Band	Channel Freq. (MHz)	Modulation	RB No.	RB offset	NB Position	Conducted Output Power (dBm)	RF Output Power (W) ERP	Limit (W) ERP
Band 12 10MHz	23060 704	QPSK	1	0	Low	23.43	0.134	3
			6	0		22.35	0.105	3
		16-QAM	1	0		23.36	0.132	3
			5	0		22.43	0.107	3
	23095 707.5	QPSK	1	0		23.46	0.135	3
			6	0		22.06	0.098	3
		16-QAM	1	0		22.99	0.121	3
			5	0		21.81	0.092	3
	23130 711	QPSK	1	5	High	23.43	0.134	3
			6	0		22.34	0.104	3
		16-QAM	1	5		23.17	0.126	3
			5	1		22.37	0.105	3

Product	Connectivity Module		
Test Item	RF Output Power		
Test Mode	Mode 5: Band13 Link		
Date of Test	2021/01/08	Test Site	SR12-H
Temperature (°C)	23	Humidity (%RH)	61

Band	Channel Freq. (MHz)	Modulation	RB No.	RB offset	NB Position	Conducted Output Power (dBm)	RF Output Power (W) ERP	Limit (W) ERP
Band 13 5MHz	23205 779.5	QPSK	1	0	Low	23.14	0.126	3
			6	0		22.22	0.102	3
		16-QAM	1	0		23.06	0.123	3
			5	0		21.35	0.083	3
	23230 782	QPSK	1	0		23.22	0.128	3
			6	0		22.20	0.101	3
		16-QAM	1	0		22.94	0.120	3
			5	0		21.13	0.079	3
	23255 784.5	QPSK	1	5	High	23.26	0.129	3
			6	0		22.34	0.104	3
		16-QAM	1	5		23.25	0.129	3
			5	1		21.51	0.086	3

Band	Channel Freq. (MHz)	Modulation	RB No.	RB offset	NB Position	Conducted Output Power (dBm)	RF Output Power (W) ERP	Limit (W) ERP
Band 13 10MHz	23230 782	QPSK	1	0	Low	23.33	0.131	3
			6	0		22.47	0.108	3
		16-QAM	1	0		23.24	0.129	3
			5	0		21.37	0.084	3
		QPSK	1	5	High	23.22	0.128	3
			6	0		22.25	0.102	3
		16-QAM	1	5		23.18	0.127	3
			5	1		21.23	0.081	3

Product	Connectivity Module		
Test Item	RF Output Power		
Test Mode	Mode 6: Band26_Part22 Link		
Date of Test	2021/01/08	Test Site	SR12-H
Temperature (°C)	23	Humidity (%RH)	61

Band	Channel Freq. (MHz)	Modulation	RB No.	RB offset	NB Position	Conducted Output Power (dBm)	RF Output Power (W) ERP	Limit (W) ERP
Band 26 1.4MHz	26797 824.7	QPSK	1	0	Low	22.96	0.121	7
			6	0		21.13	0.079	7
		16-QAM	1	0		22.27	0.103	7
			5	0		21.22	0.081	7
	26915 836.5	QPSK	1	0		23.06	0.123	7
			6	0		21.16	0.080	7
		16-QAM	1	0		22.23	0.102	7
			5	0		21.18	0.080	7
	27033 848.3	QPSK	1	5	Low	23.18	0.127	7
			6	0		21.13	0.079	7
		16-QAM	1	5		22.33	0.104	7
			5	1		21.28	0.082	7

Band	Channel Freq. (MHz)	Modulation	RB No.	RB offset	NB Position	Conducted Output Power (dBm)	RF Output Power (W) ERP	Limit (W) ERP
Band 26 3MHz	26805 825.5	QPSK	1	0	Low	23.15	0.126	7
			6	0		21.16	0.080	7
		16-QAM	1	0		22.29	0.103	7
			5	0		21.25	0.081	7
	26915 836.5	QPSK	1	0		23.09	0.124	7
			6	0		21.11	0.079	7
		16-QAM	1	0		22.34	0.104	7
			5	0		21.22	0.081	7
	27025 847.5	QPSK	1	5	High	23.06	0.123	7
			6	0		21.22	0.081	7
		16-QAM	1	5		22.45	0.107	7
			5	1		21.40	0.084	7

Band	Channel Freq. (MHz)	Modulation	RB No.	RB offset	NB Position	Conducted Output Power (dBm)	RF Output Power (W) ERP	Limit (W) ERP
Band 26 5MHz	26815 826.5	QPSK	1	0	Low	23.15	0.126	7
			6	0		22.13	0.100	7
		16-QAM	1	0		22.82	0.117	7
			5	0		20.94	0.076	7
	26915 836.5	QPSK	1	0		23.06	0.123	7
			6	0		22.20	0.101	7
		16-QAM	1	0		22.92	0.119	7
			5	0		21.29	0.082	7
	27015 846.5	QPSK	1	5	High	23.29	0.130	7
			6	0		22.13	0.100	7
		16-QAM	1	5		23.01	0.122	7
			5	1		20.91	0.075	7

Band	Channel Freq. (MHz)	Modulation	RB No.	RB offset	NB Position	Conducted Output Power (dBm)	RF Output Power (W) ERP	Limit (W) ERP
Band 26 10MHz	26840 829	QPSK	1	0	Low	23.11	0.125	7
			6	0		22.08	0.098	7
		16-QAM	1	0		23.11	0.125	7
			5	0		22.37	0.105	7
	26915 836.5	QPSK	1	0		23.29	0.130	7
			6	0		22.22	0.102	7
		16-QAM	1	0		22.90	0.119	7
			5	0		21.93	0.095	7
	26990 844	QPSK	1	5	High	23.12	0.125	7
			6	0		22.23	0.102	7
		16-QAM	1	5		23.04	0.123	7
			5	1		22.23	0.102	7

Band	Channel Freq. (MHz)	Modulation	RB No.	RB offset	NB Position	Conducted Output Power (dBm)	RF Output Power (W) ERP	Limit (W) ERP
Band 26 15MHz	26865 831.5	QPSK	1	0	Low	23.17	0.126	7
			6	0		23.06	0.123	7
		16-QAM	1	0		23.13	0.125	7
			5	0		23.02	0.122	7
	26915 836.5	QPSK	1	0		23.37	0.132	7
			6	0		23.22	0.128	7
		16-QAM	1	0		23.21	0.128	7
			5	0		23.08	0.124	7
	26965 841.5	QPSK	1	5	High	23.33	0.131	7
			6	0		23.26	0.129	7
		16-QAM	1	5		23.25	0.129	7
			5	1		23.21	0.128	7

Product	Connectivity Module		
Test Item	RF Output Power		
Test Mode	Mode 7: Band26_Part90 Link		
Date of Test	2021/01/08	Test Site	SR12-H
Temperature (°C)	23	Humidity (%RH)	61

Band	Channel Freq. (MHz)	Modulation	RB No.	RB offset	NB Position	Conducted Output Power (dBm)	RF Output Power (W) ERP	Limit (W) ERP
Band 26 1.4MHz	26697 814.7	QPSK	1	0	Low	23.09	0.081	100
			6	0		21.22	0.053	100
		16-QAM	1	0		22.27	0.067	100
			5	0		21.37	0.055	100
	26740 819	QPSK	1	0		22.96	0.079	100
			6	0		21.07	0.051	100
		16-QAM	1	0		22.25	0.067	100
			5	0		21.10	0.051	100
	26783 823.3	QPSK	1	5	Low	22.96	0.079	100
			6	0		21.20	0.053	100
		16-QAM	1	5		22.46	0.070	100
			5	1		21.27	0.053	100

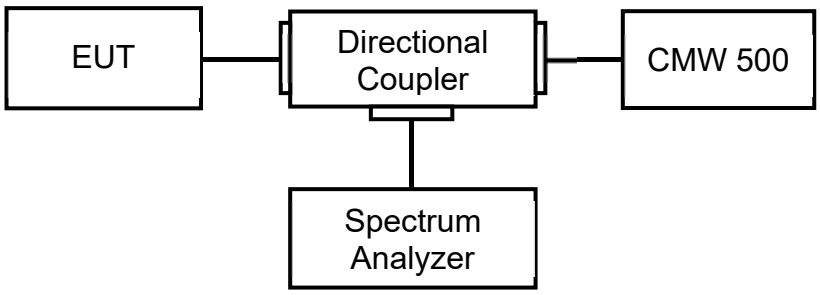
Band	Channel Freq. (MHz)	Modulation	RB No.	RB offset	NB Position	Conducted Output Power (dBm)	RF Output Power (W) ERP	Limit (W) ERP
Band 26 3MHz	26705 815.5	QPSK	1	0	Low	23.09	0.081	100
			6	0		21.15	0.052	100
		16-QAM	1	0		22.21	0.066	100
			5	0		21.31	0.054	100
	26740 819	QPSK	1	0		22.99	0.079	100
			6	0		21.19	0.052	100
		16-QAM	1	0		22.40	0.069	100
			5	0		21.32	0.054	100
	26775 822.5	QPSK	1	5	High	23.08	0.081	100
			6	0		21.25	0.053	100
		16-QAM	1	5		22.34	0.068	100
			5	1		21.18	0.052	100

Band	Channel Freq. (MHz)	Modulation	RB No.	RB offset	NB Position	Conducted Output Power (dBm)	RF Output Power (W) ERP	Limit (W) ERP
Band 26 5MHz	26715 816.5	QPSK	1	0	Low	23.12	0.082	100
			6	0		22.28	0.067	100
		16-QAM	1	0		22.97	0.079	100
			5	0		21.29	0.054	100
	26740 819	QPSK	1	0		23.18	0.083	100
			6	0		22.07	0.064	100
		16-QAM	1	0		22.97	0.079	100
			5	0		21.15	0.052	100
	26765 821.5	QPSK	1	5	High	23.22	0.084	100
			6	0		22.28	0.067	100
		16-QAM	1	5		22.99	0.079	100
			5	1		21.14	0.052	100

Band	Channel Freq. (MHz)	Modulation	RB No.	RB offset	NB Position	Conducted Output Power (dBm)	RF Output Power (W) ERP	Limit (W) ERP
Band 26 10MHz	26740 819	QPSK	1	0	Low	23.26	0.085	100
			6	0		22.23	0.067	100
		16-QAM	1	0		23.01	0.080	100
			5	0		22.04	0.064	100
		QPSK	1	5	High	23.25	0.084	100
			6	0		22.31	0.068	100
		16-QAM	1	5		22.95	0.079	100
			5	1		22.33	0.068	100

4. Occupied Bandwidth

4.1. Test Setup



4.2. Test Procedure

1. The EUT was connected to Spectrum Analyzer and Base Station via power divider.
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. The 26 dB bandwidth and 99% occupied bandwidth of the low & middle & high channel for the highest RF powers were measured.

4.3. Test Method

KDB 971168 D01 Power Meas License Digital Systems v03 sub-clause 4.2 & 4.3
ANSI C63.26: 2015 Sub-clause 5.4.3 & 5.4.4

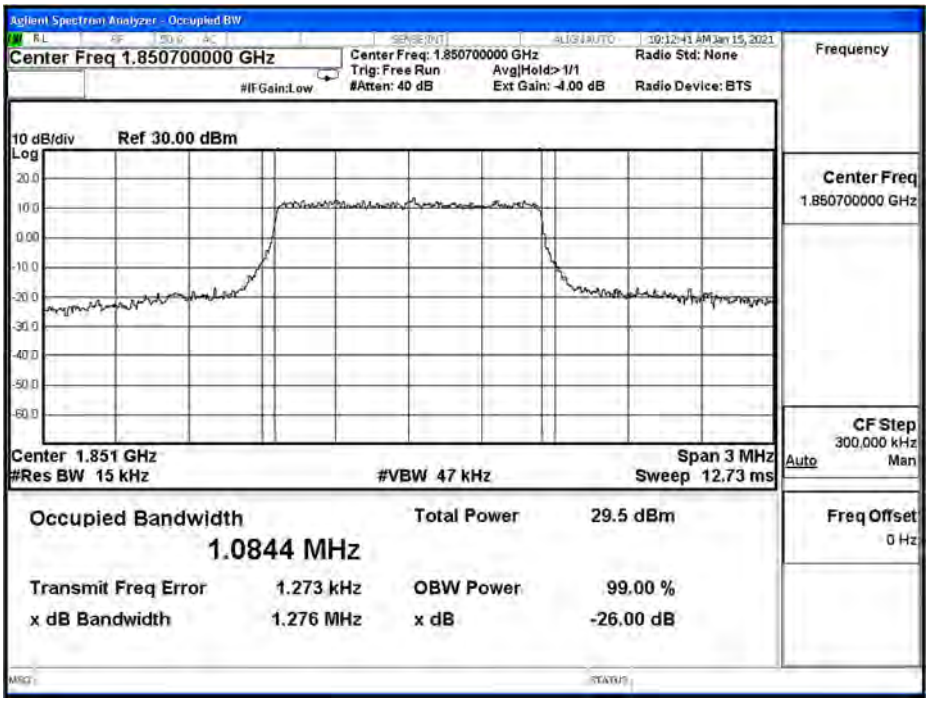
4.4. Test Result

Product	Connectivity Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: Band2 Link		
Date of Test	2021/01/15	Test Site	SR12-H
Temperature (°C)	24	Humidity (%RH)	60

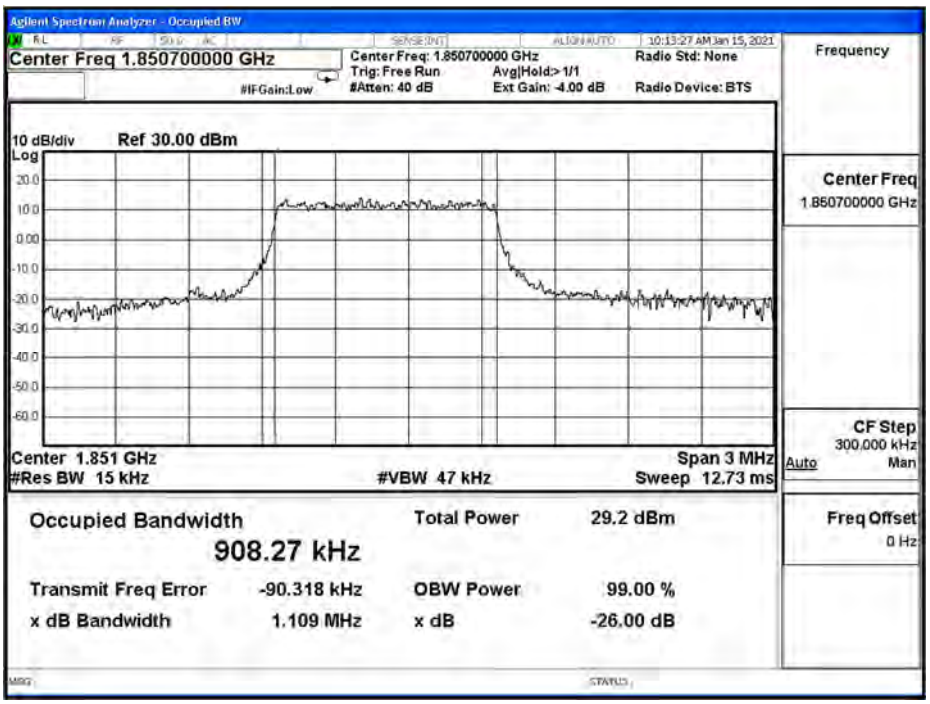
Bandwidth (MHz)	Modulation	Frequency (MHz)	Measure Level (MHz)		Limit (MHz)
			26dB BW	99% BW	
1.4M	QPSK	1850.7	1.276	1.084	N/A
		1880.0	1.274	1.087	N/A
		1909.3	1.264	1.085	N/A
	16-QAM	1850.7	1.109	0.908	N/A
		1880.0	1.105	0.908	N/A
		1909.3	1.115	0.907	N/A
3M	QPSK	1851.5	1.386	1.099	N/A
		1880.0	1.367	1.096	N/A
		1908.5	1.544	1.102	N/A
	16-QAM	1851.5	1.259	0.923	N/A
		1880.0	1.177	0.921	N/A
		1908.5	1.213	0.922	N/A
5M	QPSK	1852.5	1.384	1.097	N/A
		1880.0	1.425	1.100	N/A
		1907.5	1.440	1.098	N/A
	16-QAM	1852.5	1.214	0.928	N/A
		1880.0	1.241	0.930	N/A
		1907.5	1.195	0.930	N/A
10M	QPSK	1855.0	1.527	1.106	N/A
		1880.0	1.452	1.111	N/A
		1905.0	1.530	1.119	N/A
	16-QAM	1855.0	1.290	0.948	N/A
		1880.0	1.328	0.945	N/A
		1905.0	1.388	0.930	N/A
15M	QPSK	1857.5	1.563	1.138	N/A
		1880.0	1.594	1.137	N/A
		1902.5	1.580	1.129	N/A
	16-QAM	1857.5	1.481	0.981	N/A
		1880.0	1.492	0.987	N/A
		1902.5	1.358	0.955	N/A

Bandwidth (MHz)	Modulation	Frequency (MHz)	Measure Level (MHz)		Limit (MHz)
			26dB BW	99% BW	
20M	QPSK	1860.0	1.506	1.118	N/A
		1880.0	1.612	1.123	N/A
		1900.0	1.681	1.118	N/A
	16-QAM	1860.0	1.592	0.971	N/A
		1880.0	1.528	0.980	N/A
		1900.0	1.404	0.957	N/A

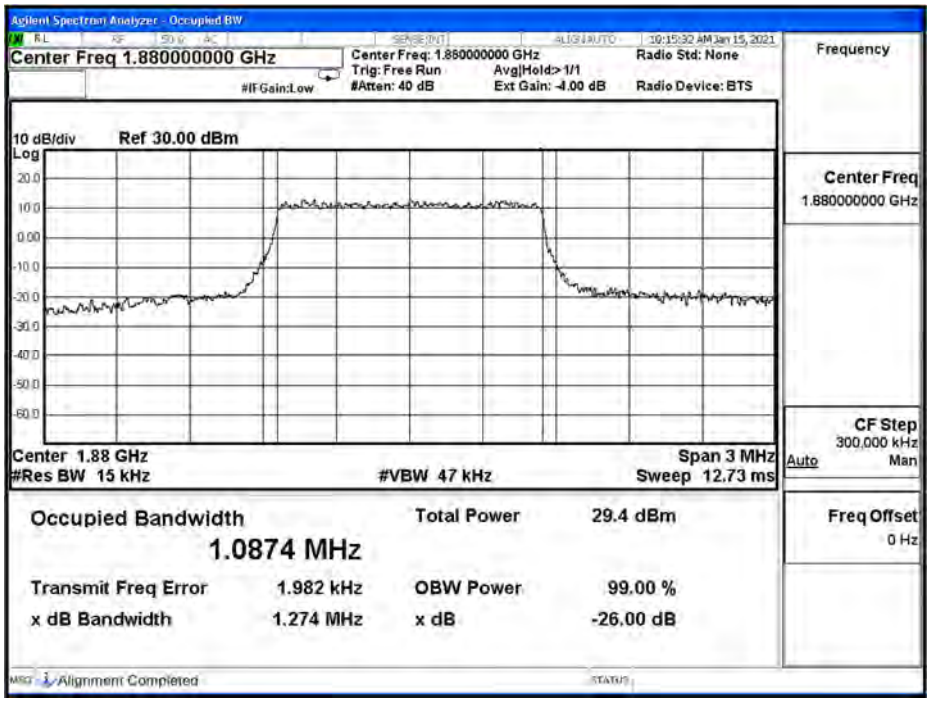
CAT-M1_B2_CH18607_1.4M__QPSK_6RB0



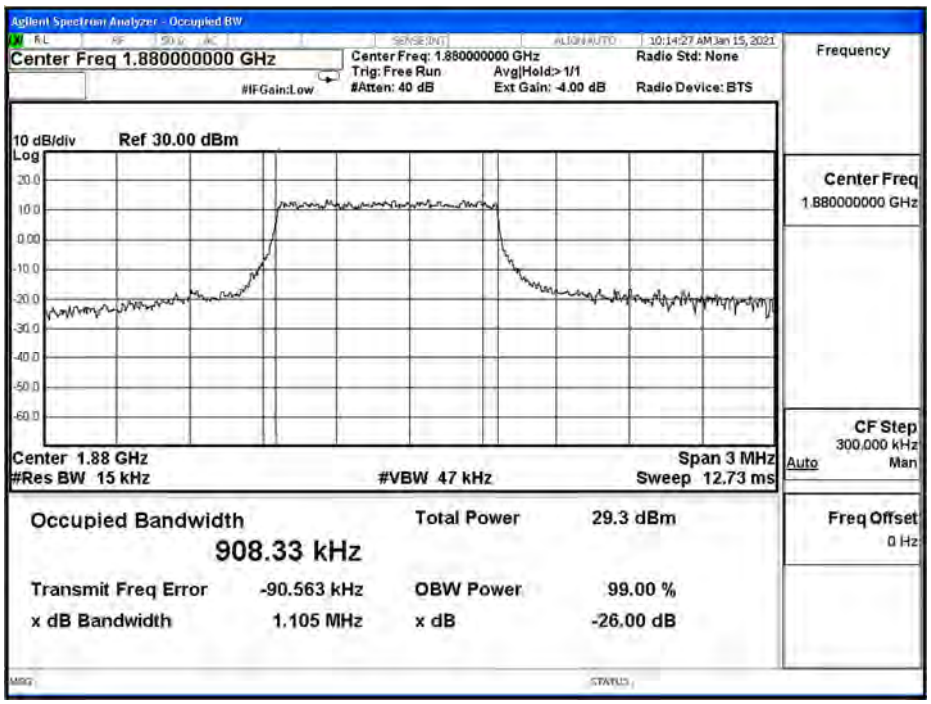
CAT-M1_B2_CH18607_1.4M_16-QAM_5RB0



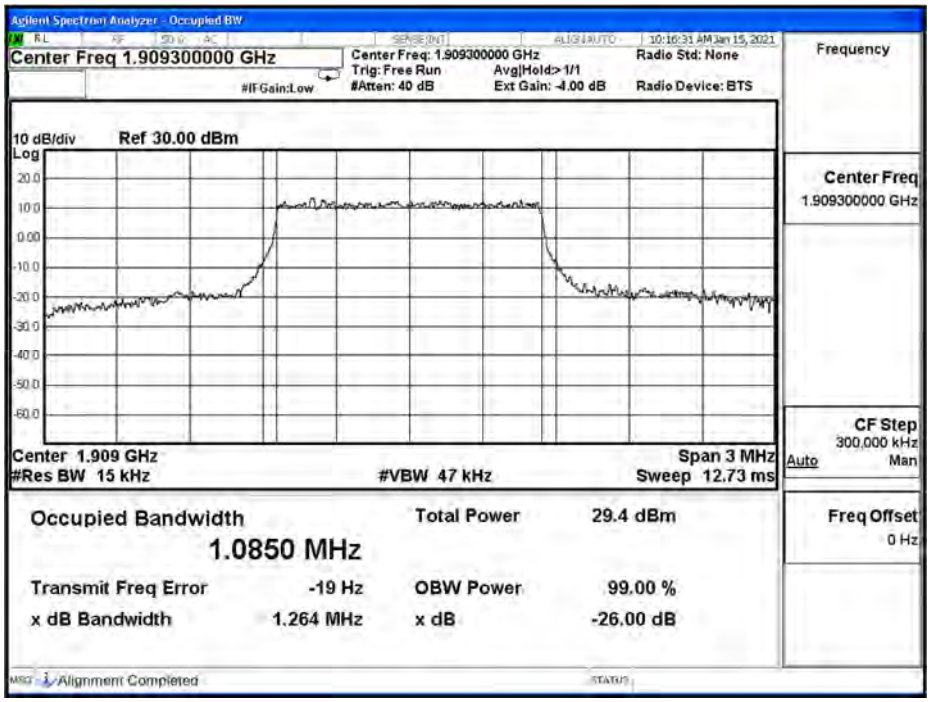
CAT-M1_B2_CH18900_1.4M__QPSK_6RB0



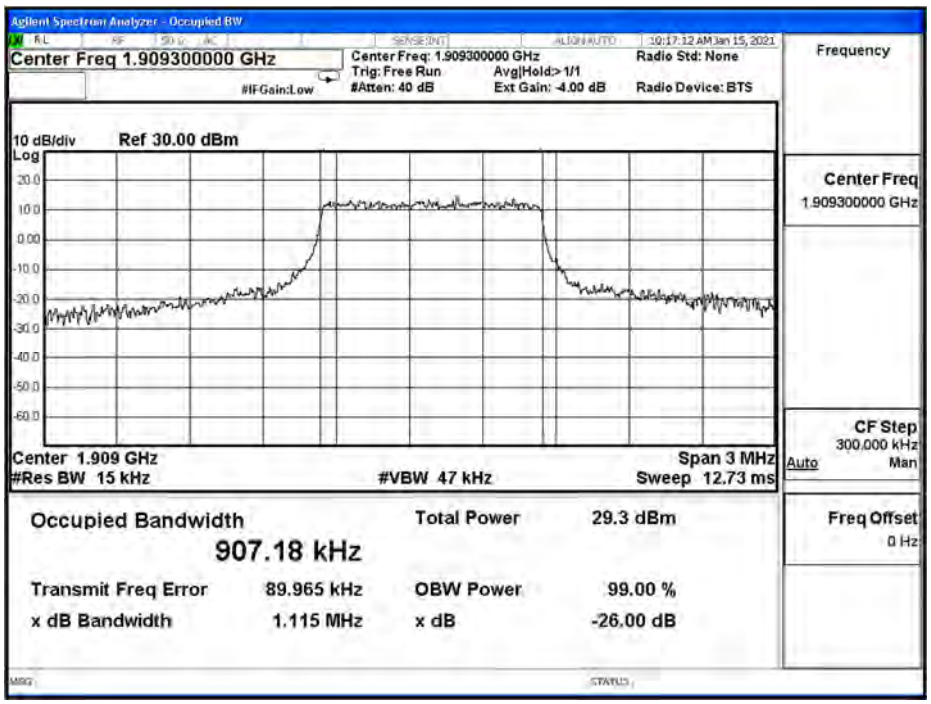
CAT-M1_B2_CH18900_1.4M_16-QAM_5RB0



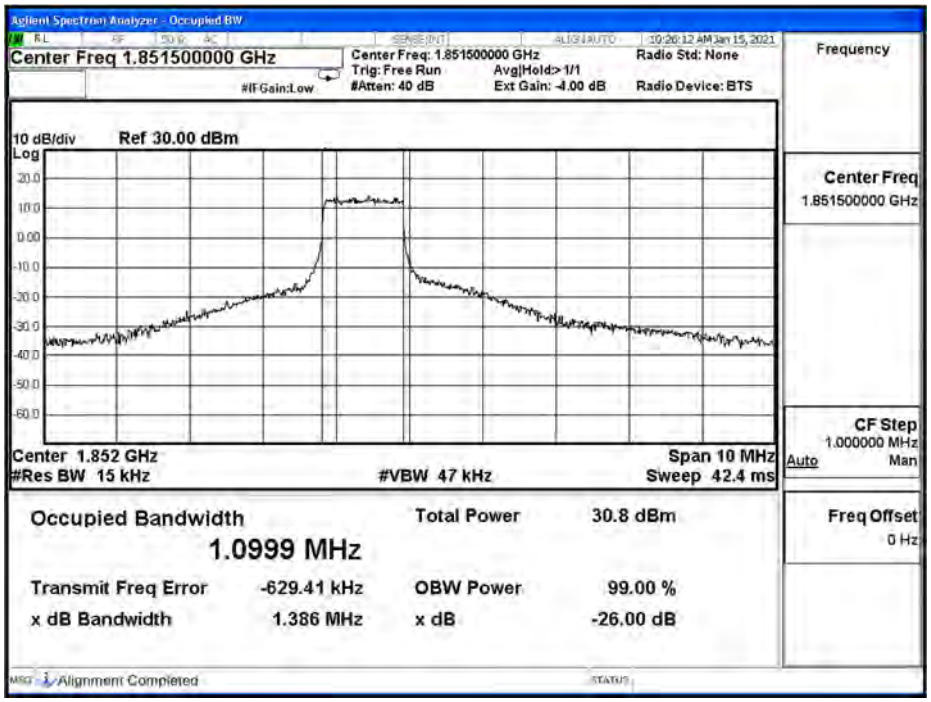
CAT-M1_B2_CH19193_1.4M__QPSK_6RB0



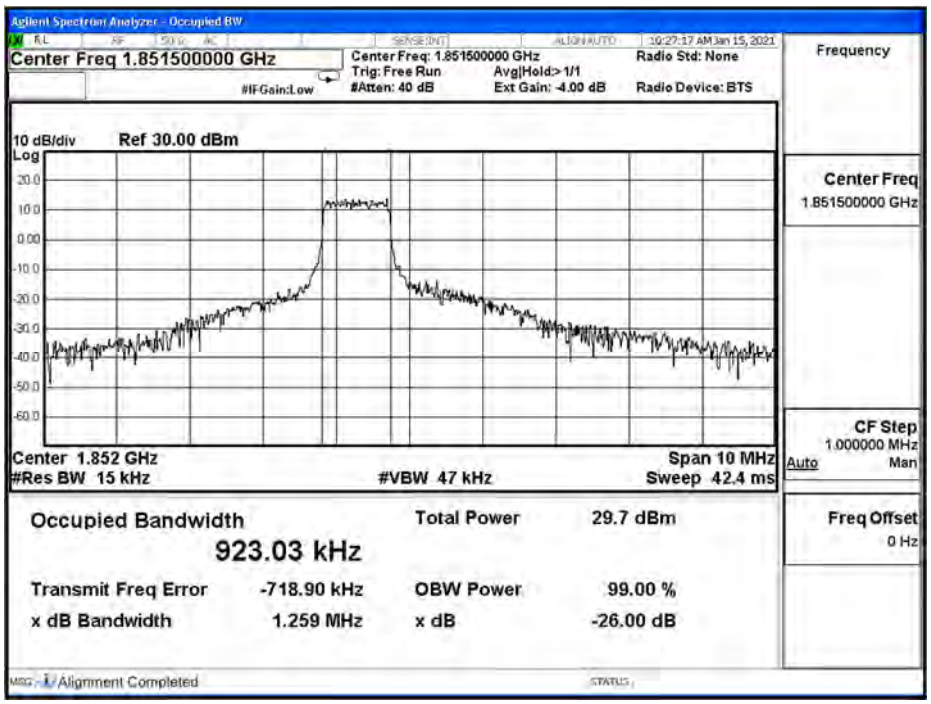
CAT-M1_B2_CH19193_1.4M_16-QAM_5RB1



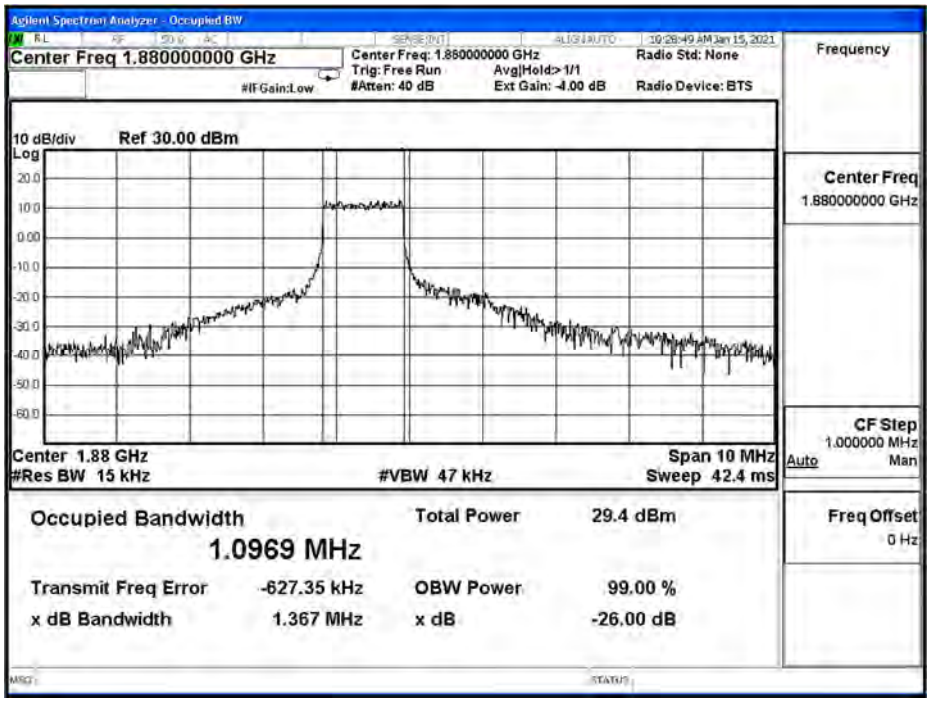
CAT-M1_B2_CH18615_3M__QPSK_6RB0



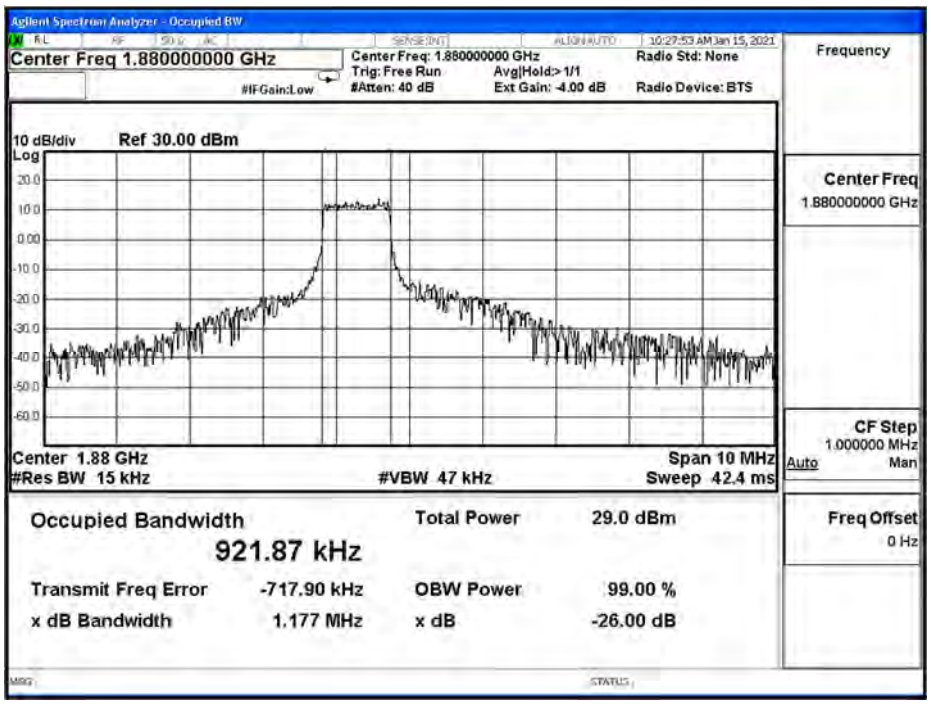
CAT-M1_B2_CH18615_3M_16-QAM_5RB0



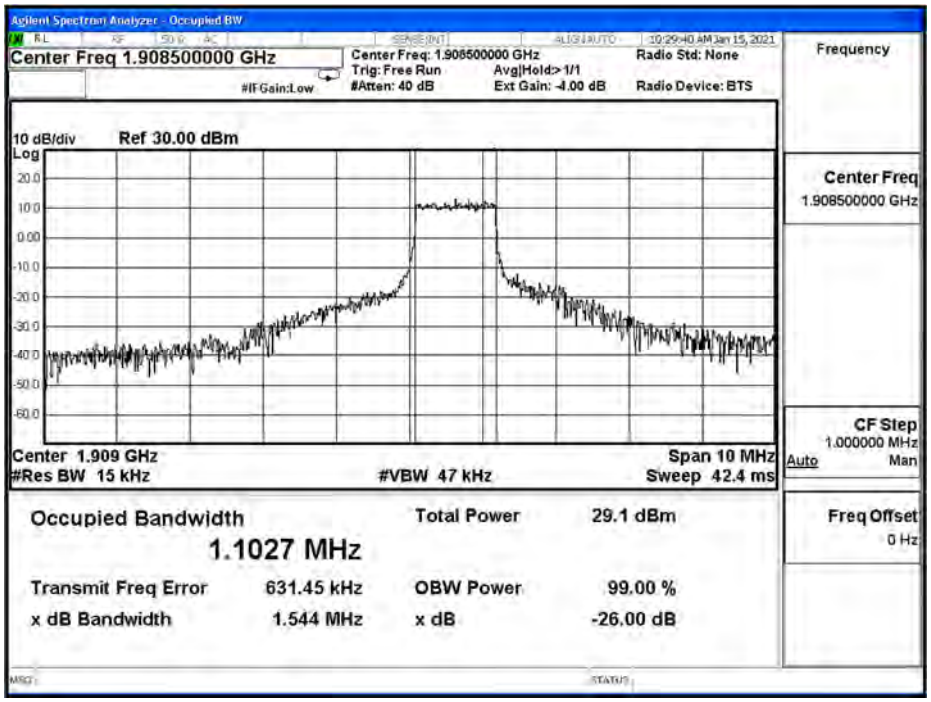
CAT-M1_B2_CH18900_3M__QPSK_6RB0



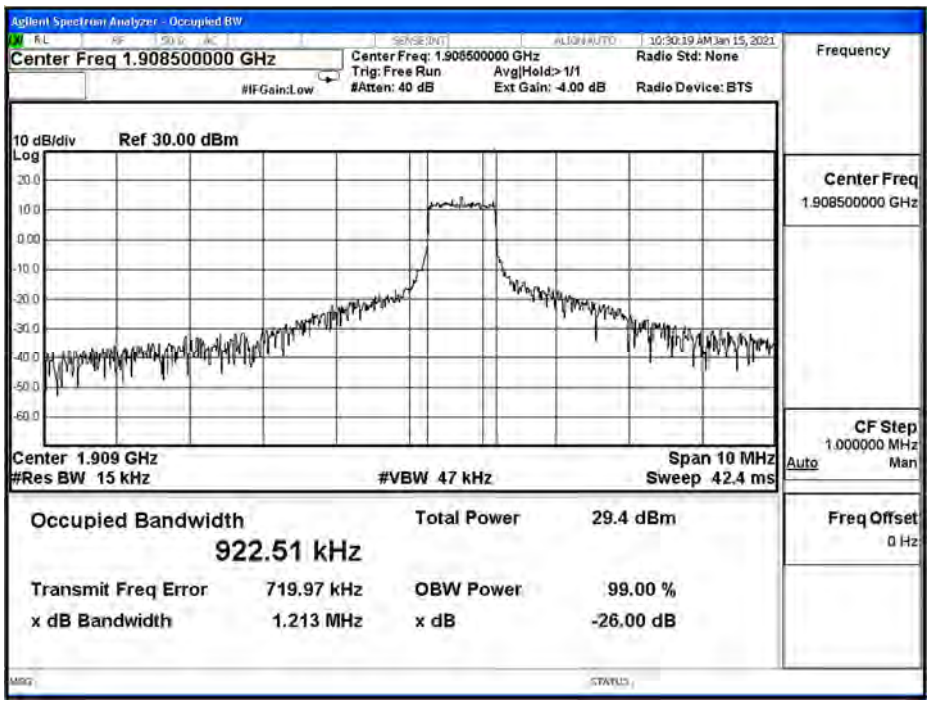
CAT-M1_B2_CH18900_3M_16-QAM_5RB0



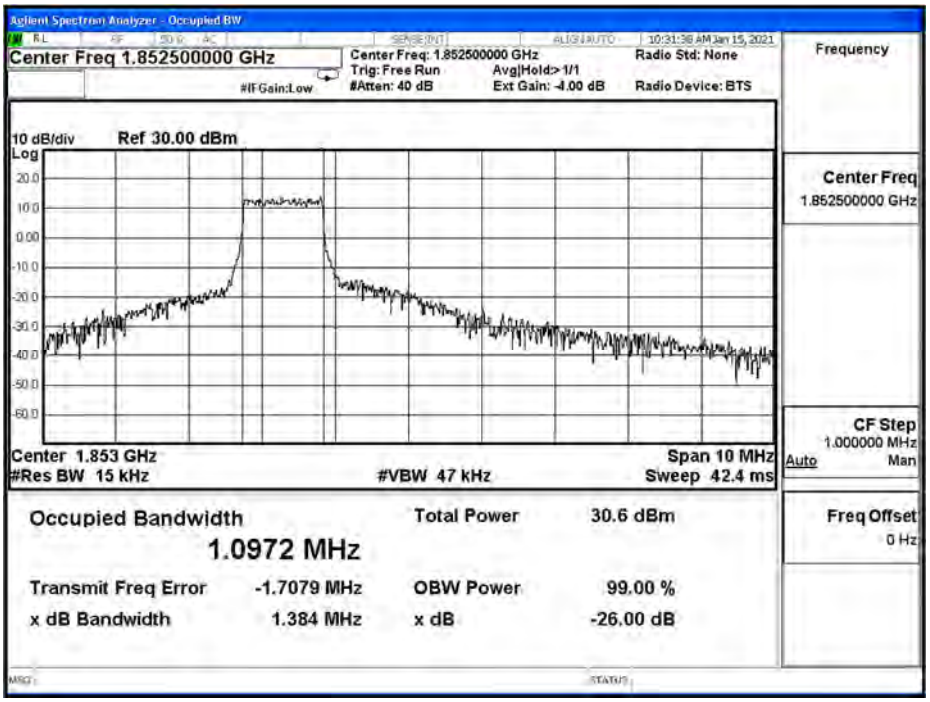
CAT-M1_B2_CH19185_3M__QPSK_6RB0



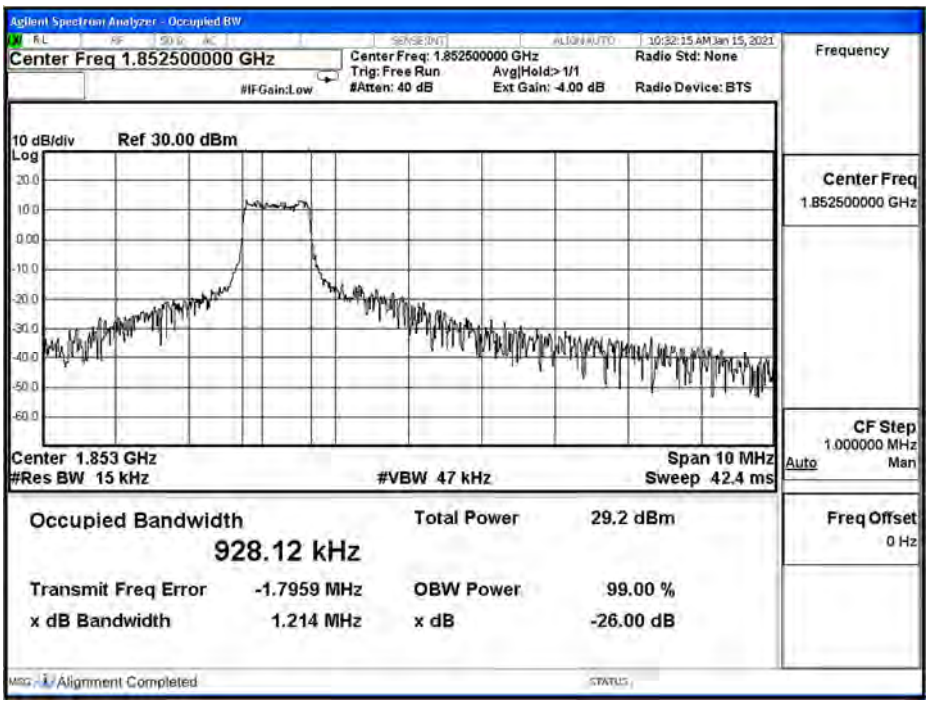
CAT-M1_B2_CH19185_3M_16-QAM_5RB1



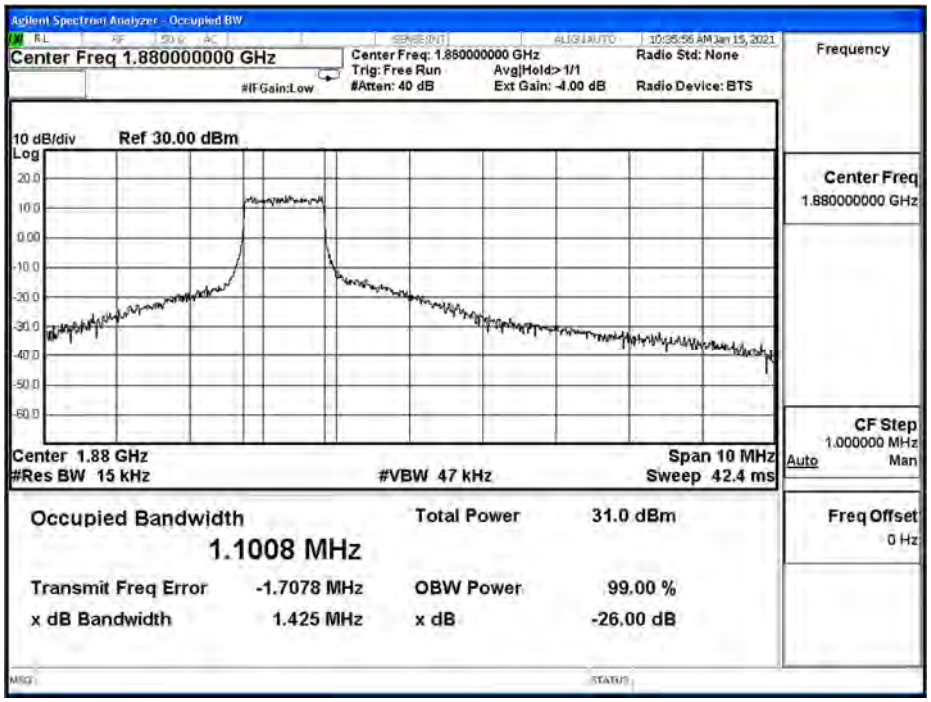
CAT-M1_B2_CH18625_5M__QPSK_6RB0



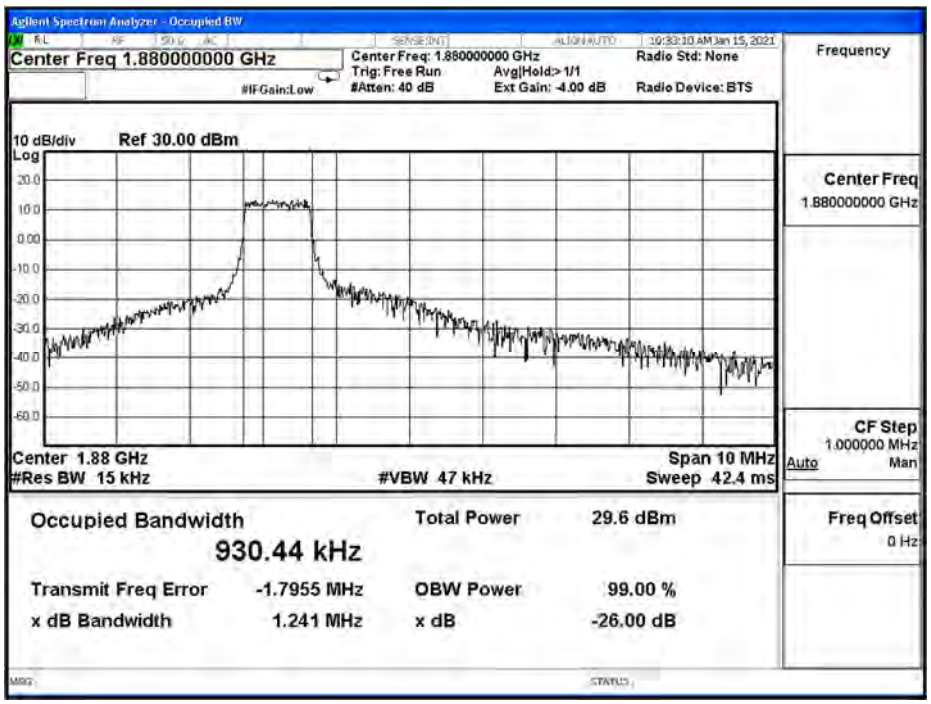
CAT-M1_B2_CH18625_5M_16-QAM_5RB0



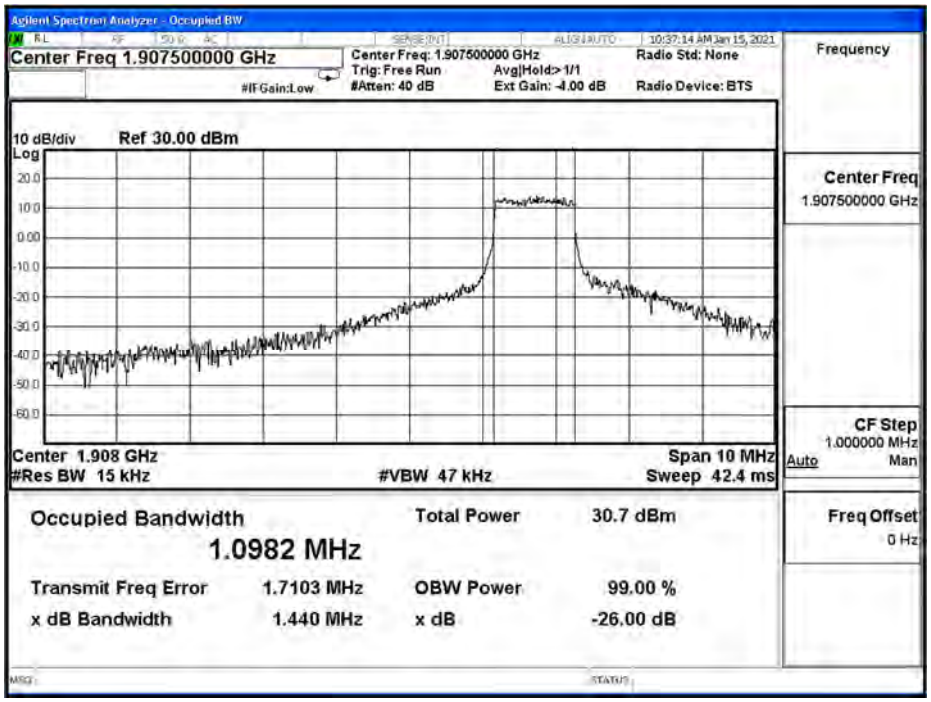
CAT-M1_B2_CH18900_5M__QPSK_6RB0



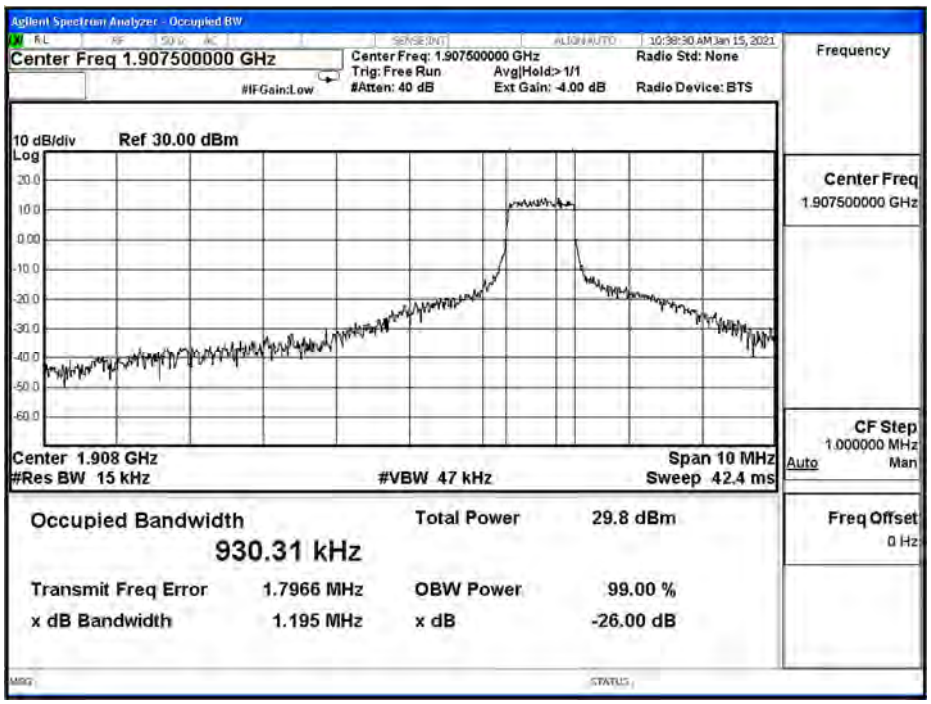
CAT-M1_B2_CH18900_5M_16-QAM_5RB0



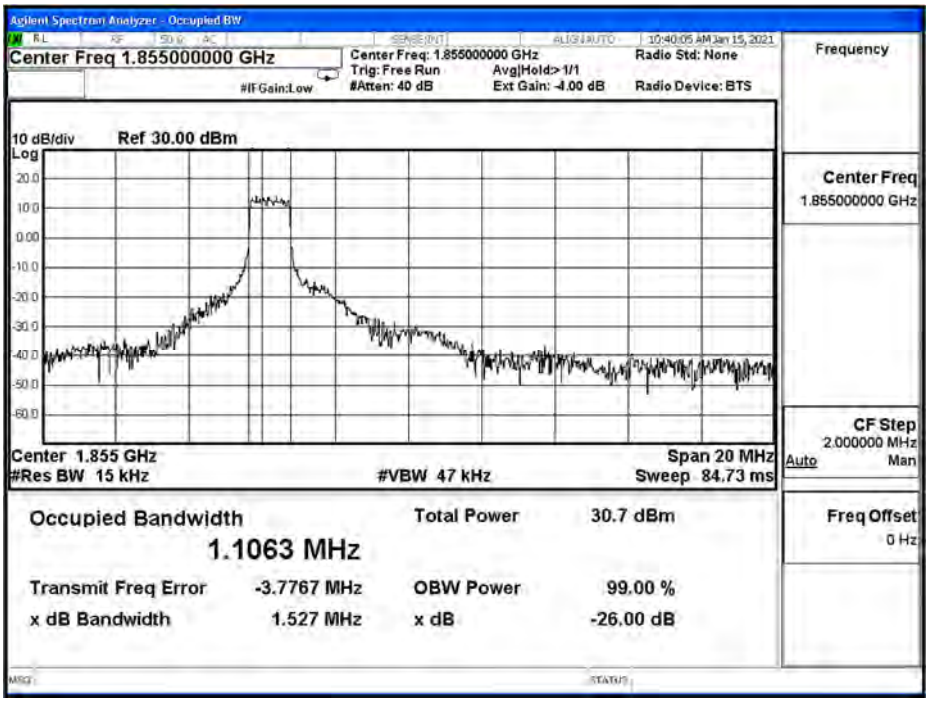
CAT-M1_B2_CH19175_5M__QPSK_6RB0



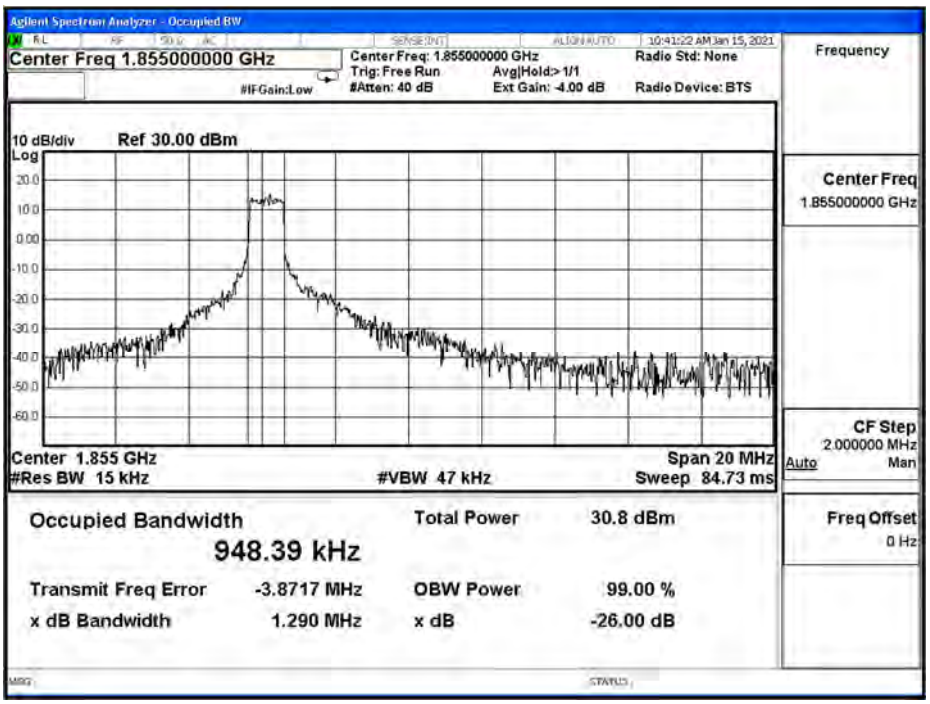
CAT-M1_B2_CH19175_5M_16-QAM_5RB1



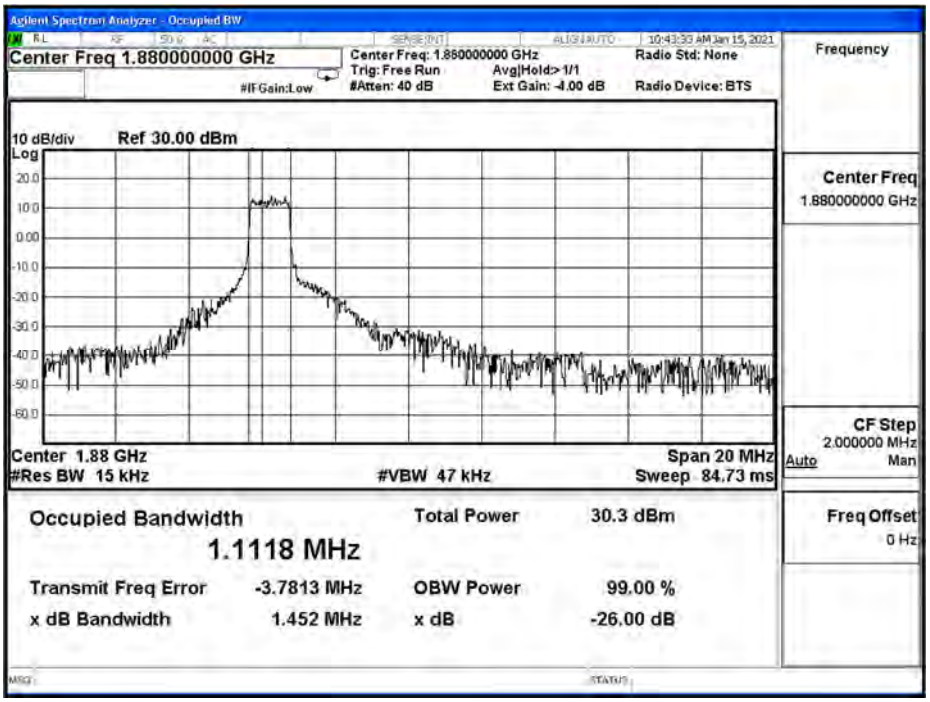
CAT-M1_B2_CH18650_10M__QPSK_6RB0



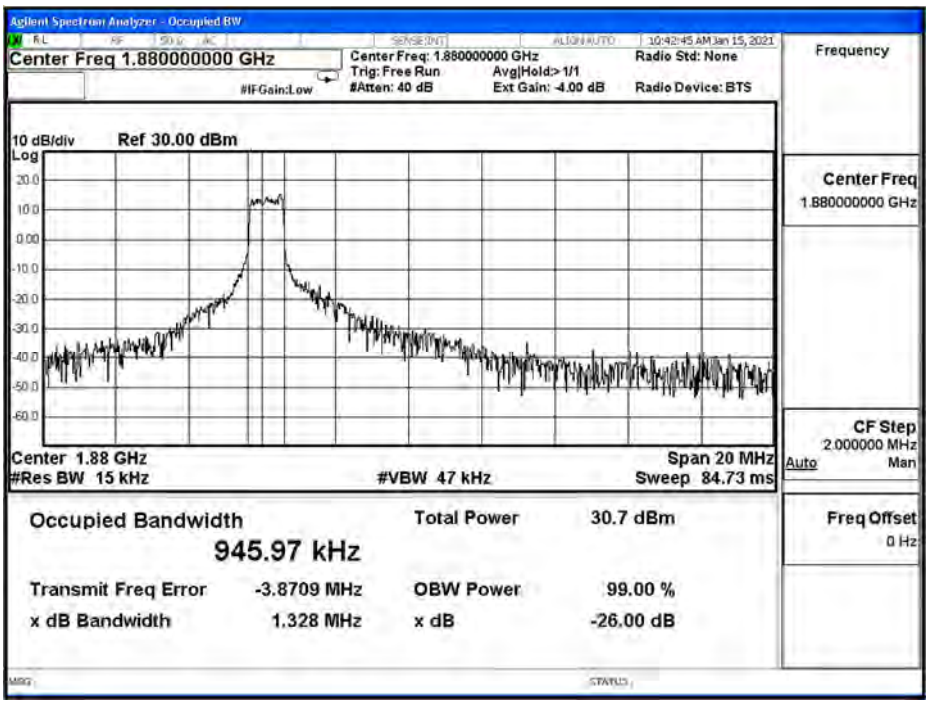
CAT-M1_B2_CH18650_10M_16-QAM_5RB0



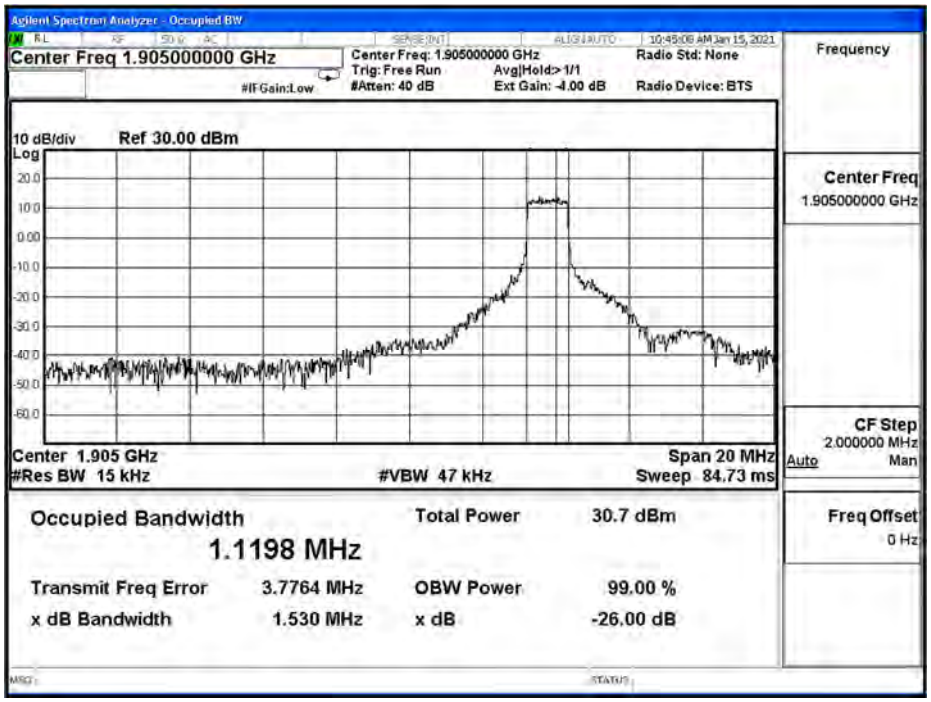
CAT-M1_B2_CH18900_10M__QPSK_6RB0



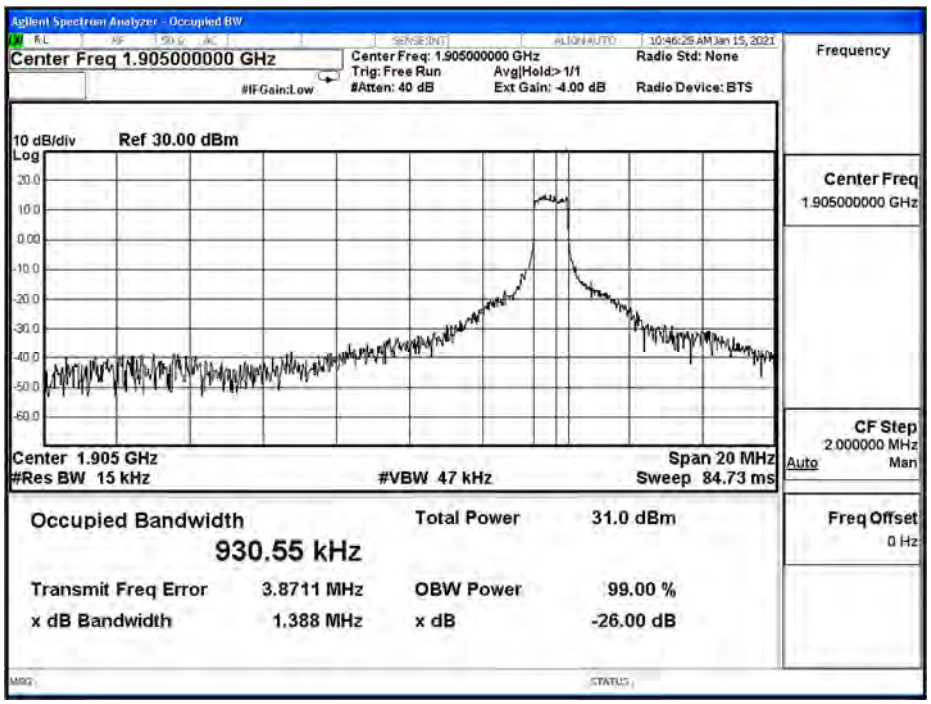
CAT-M1_B2_CH18900_10M_16-QAM_5RB0



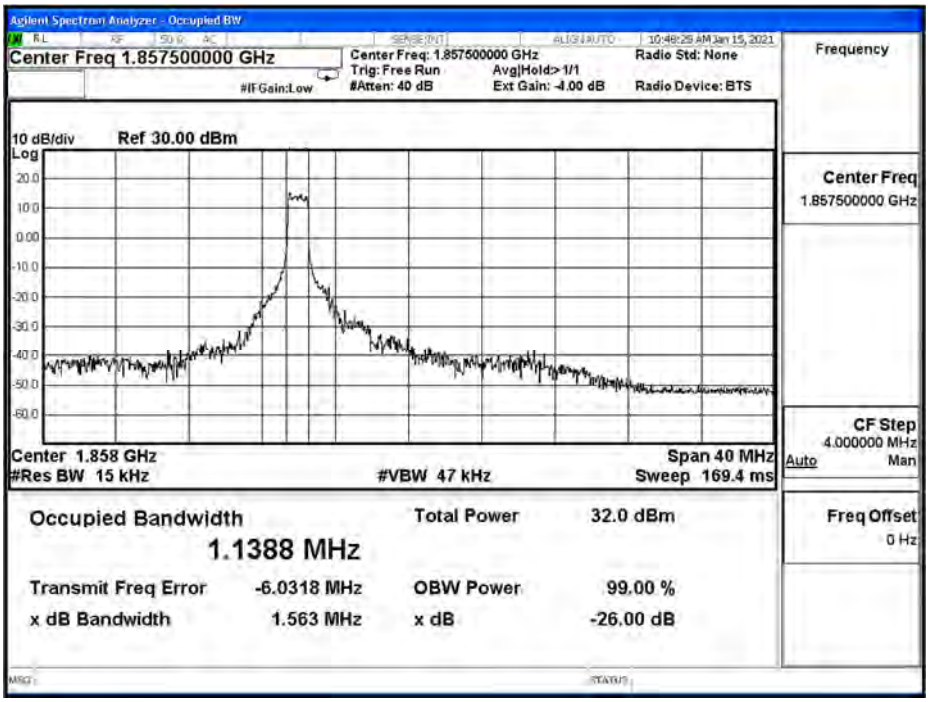
CAT-M1_B2_CH19150_10M__QPSK_6RB0



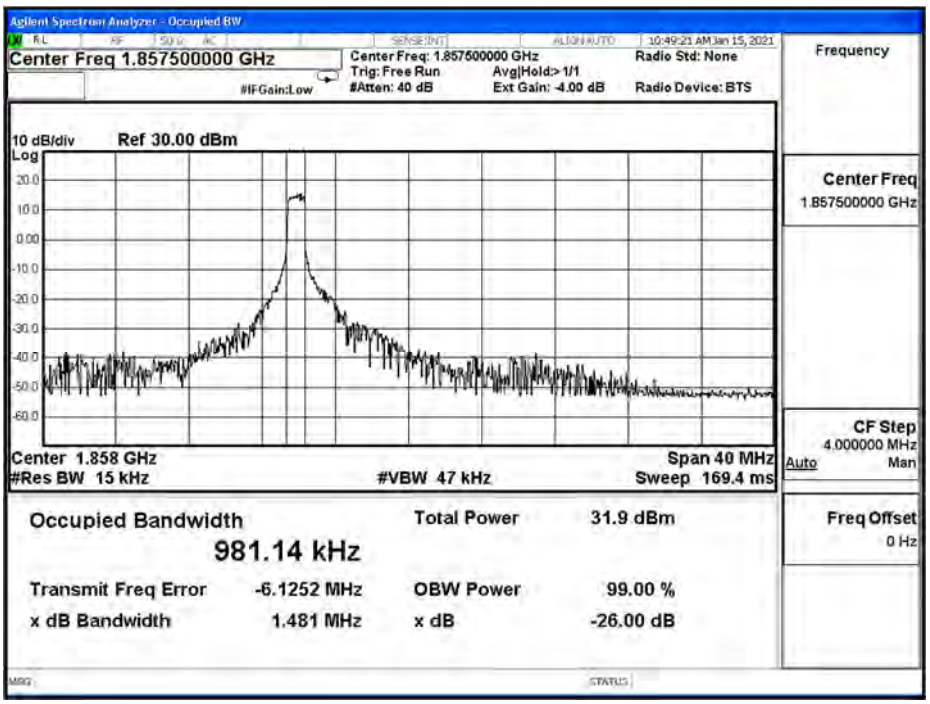
CAT-M1_B2_CH19150_10M_16-QAM_5RB1



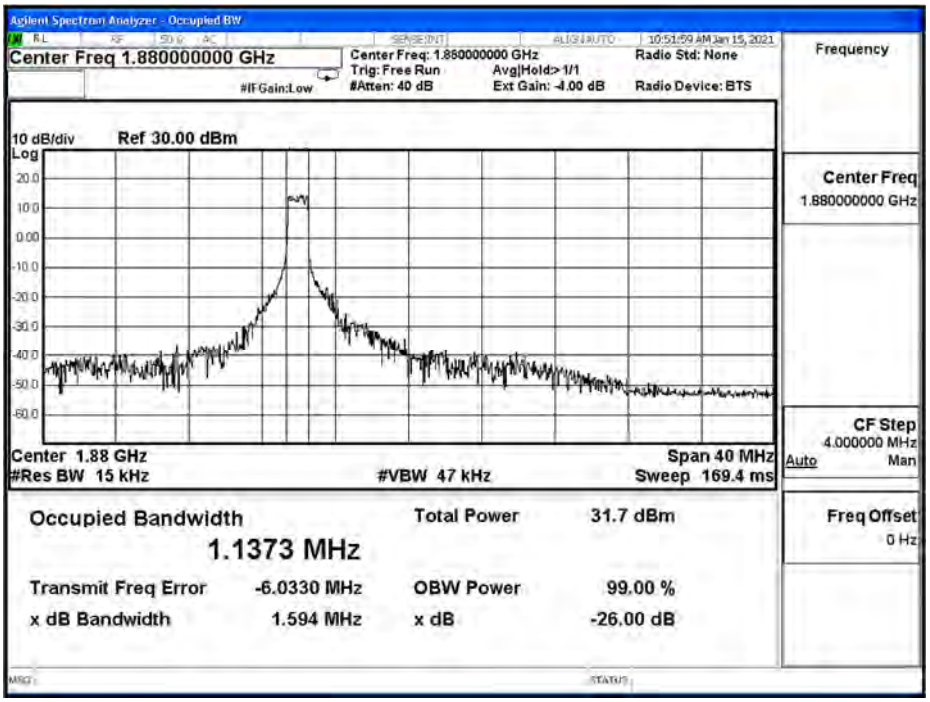
CAT-M1_B2_CH18675_15M__QPSK_6RB0



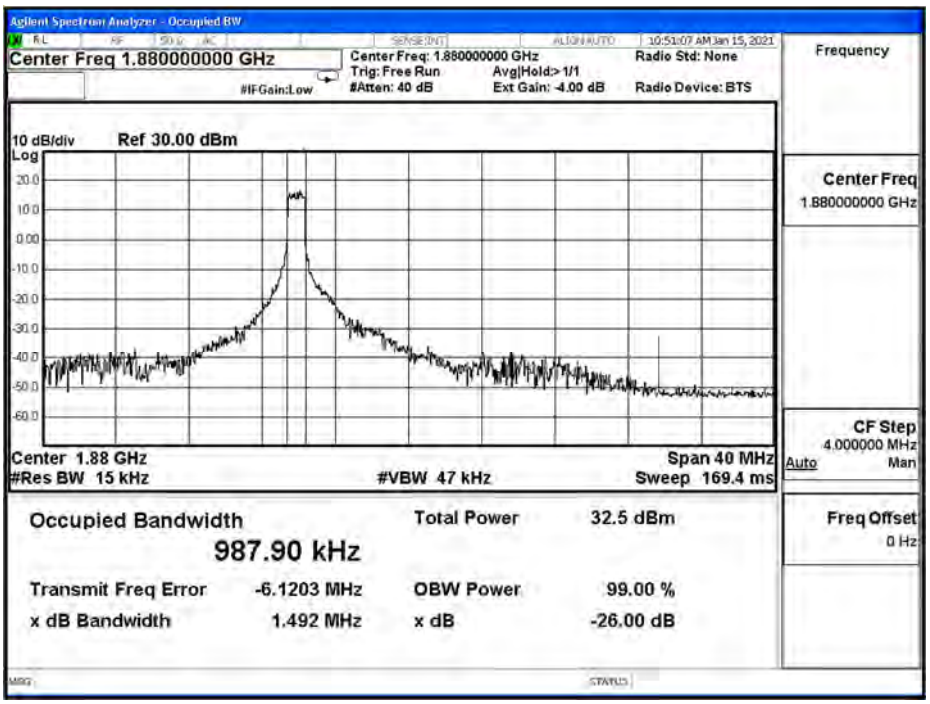
CAT-M1_B2_CH18675_15M_16-QAM_5RB0



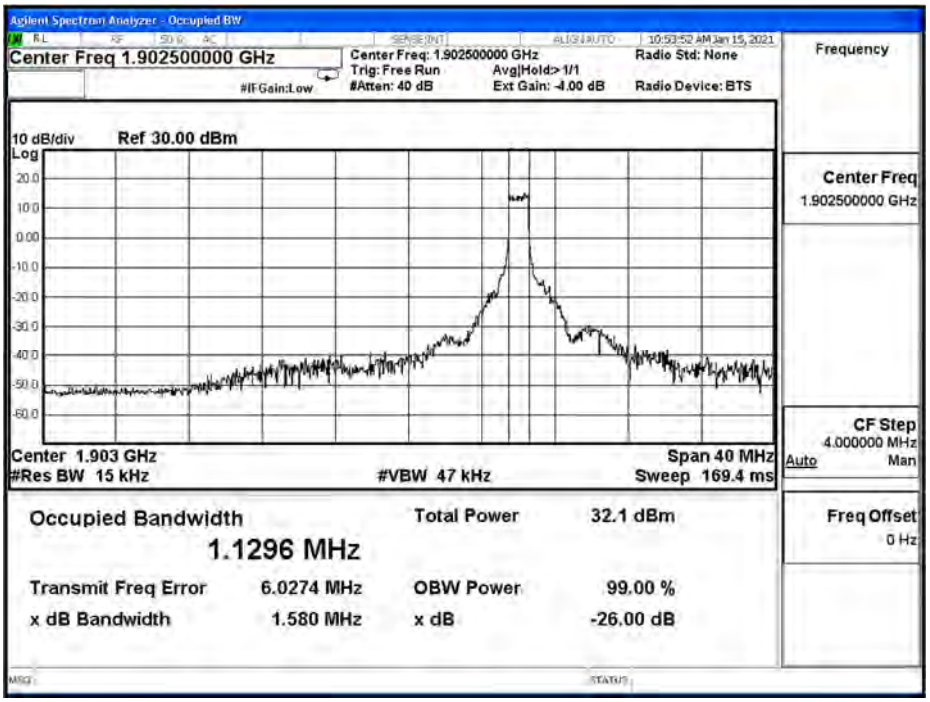
CAT-M1_B2_CH18900_15M__QPSK_6RB0



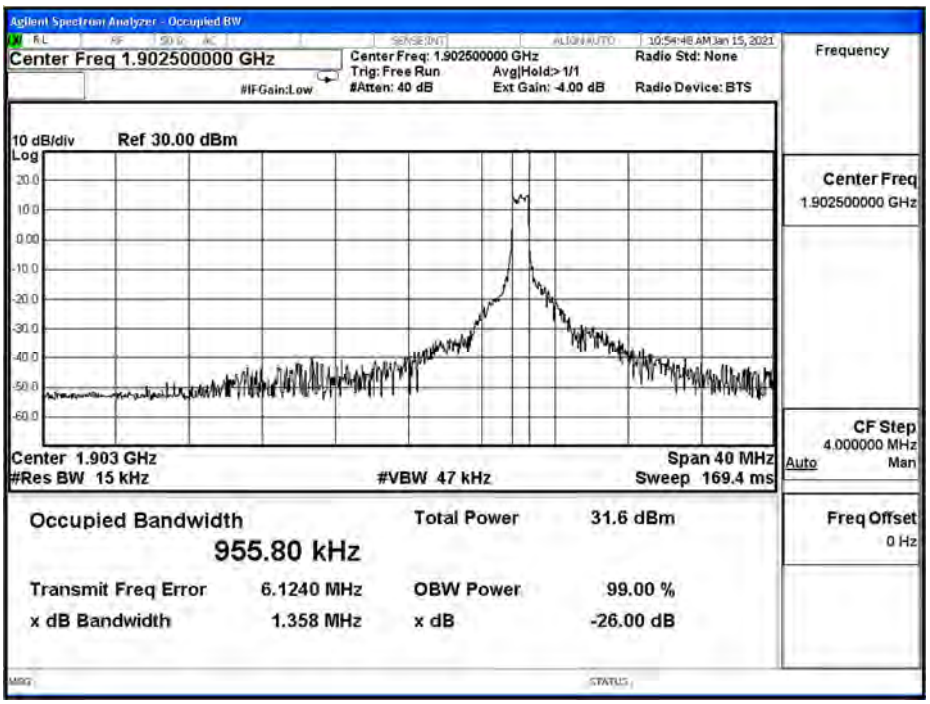
CAT-M1_B2_CH18900_15M_16-QAM_5RB0



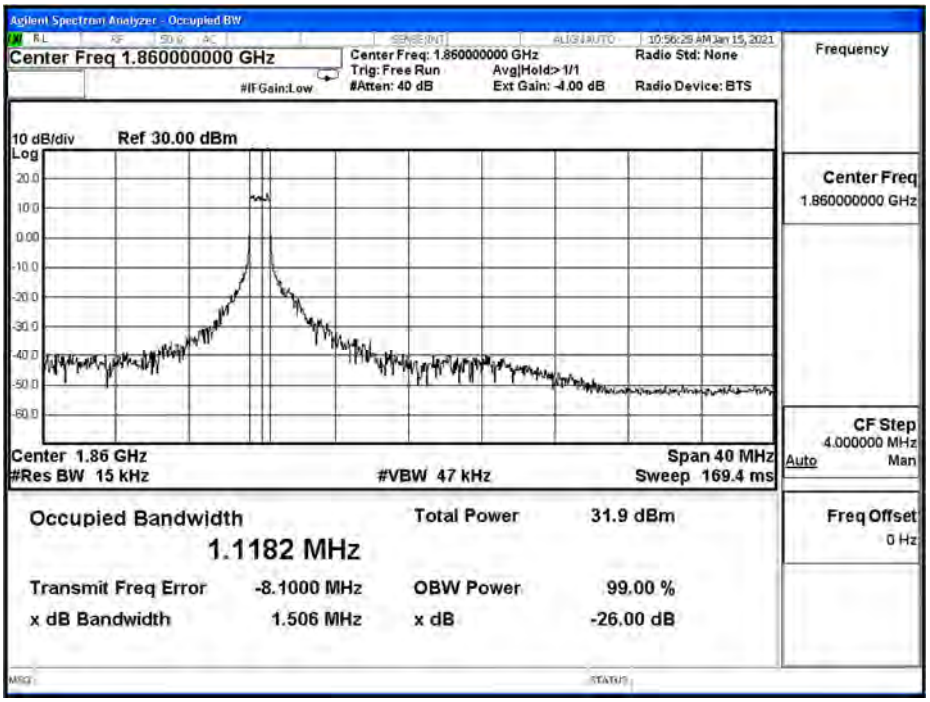
CAT-M1_B2_CH19125_15M__QPSK_6RB0



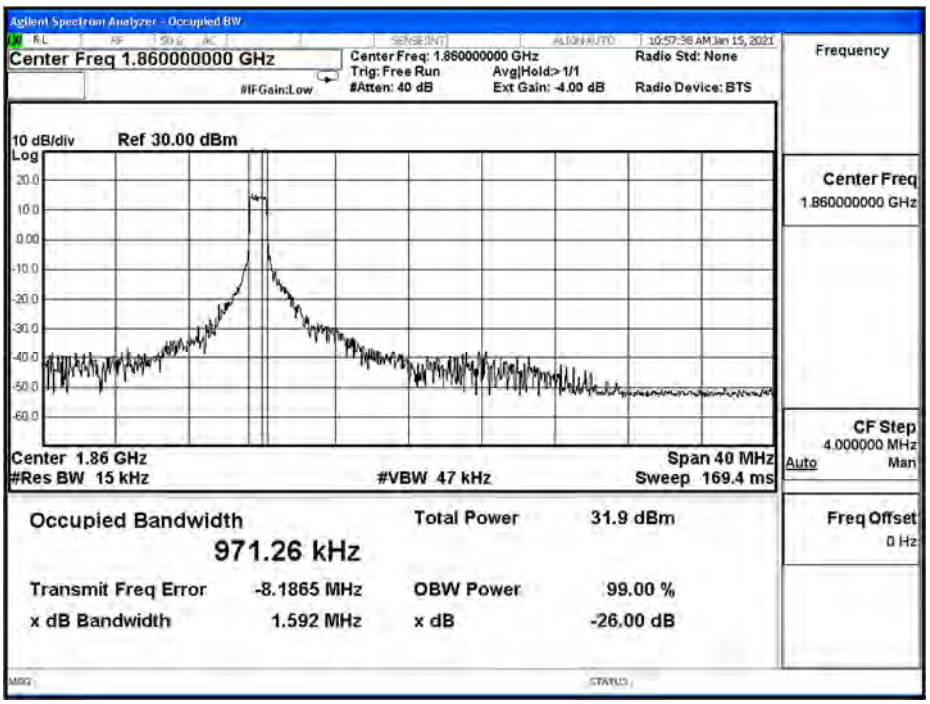
CAT-M1_B2_CH19125_15M_16-QAM_5RB1



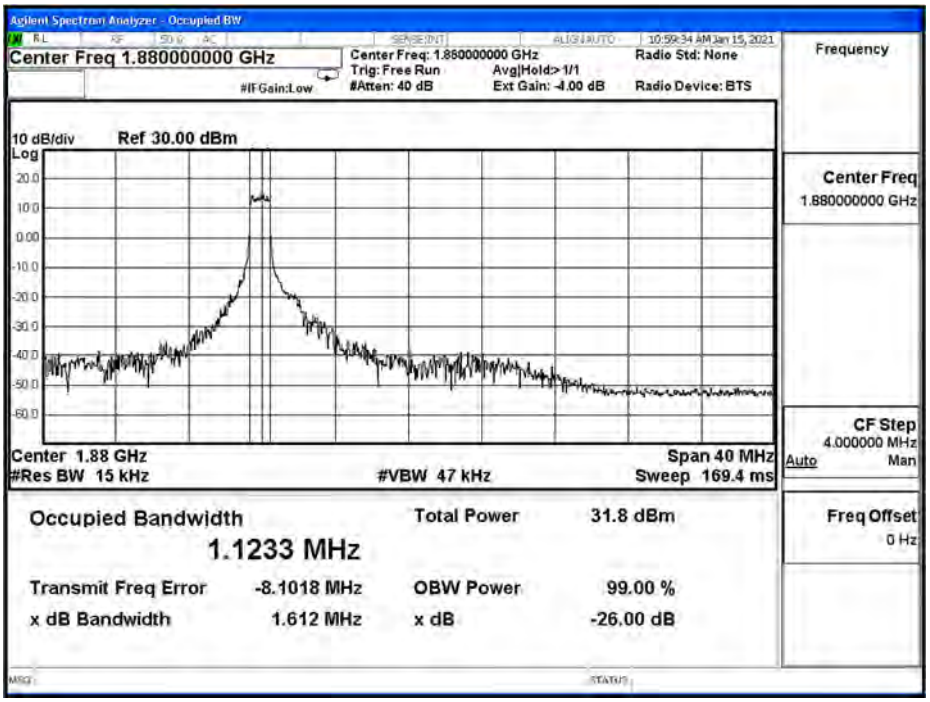
CAT-M1_B2_CH18700_20M__QPSK_6RB0



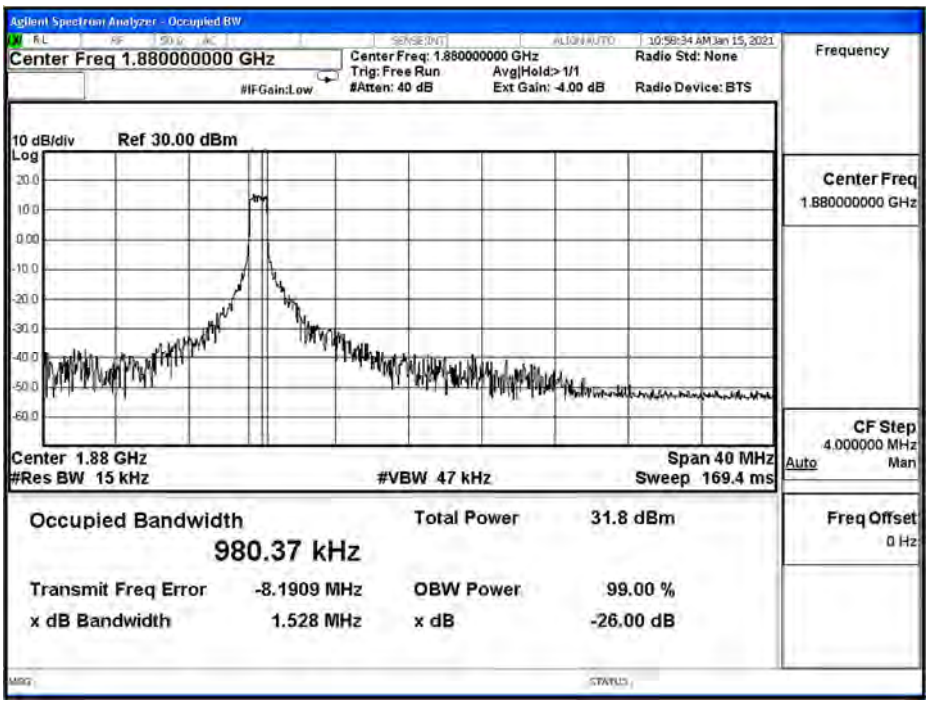
CAT-M1_B2_CH18700_20M_16-QAM_5RB0



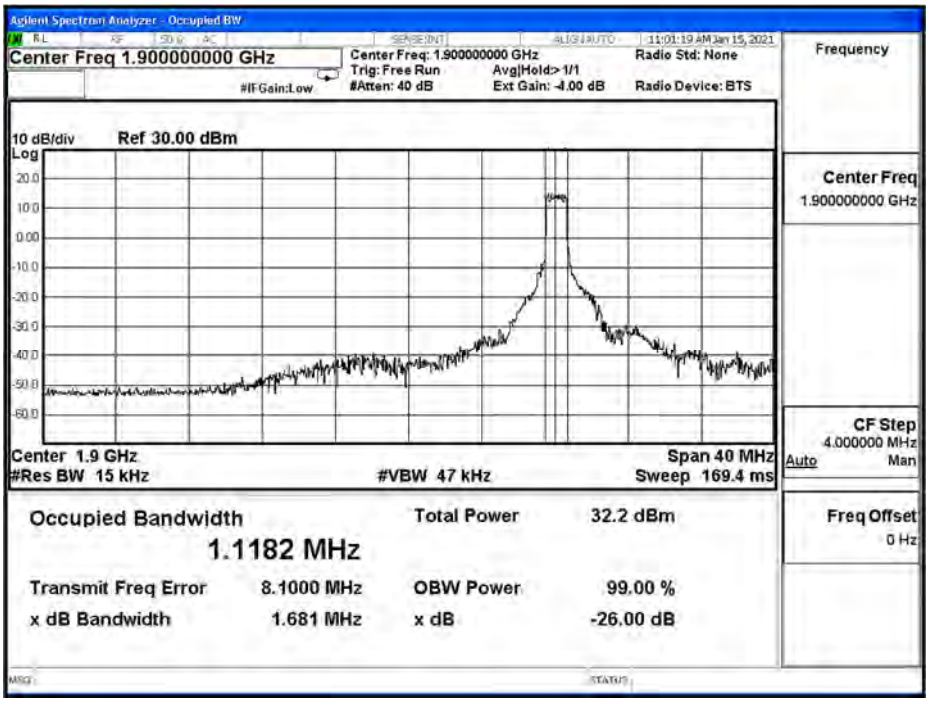
CAT-M1_B2_CH18900_20M__QPSK_6RB0



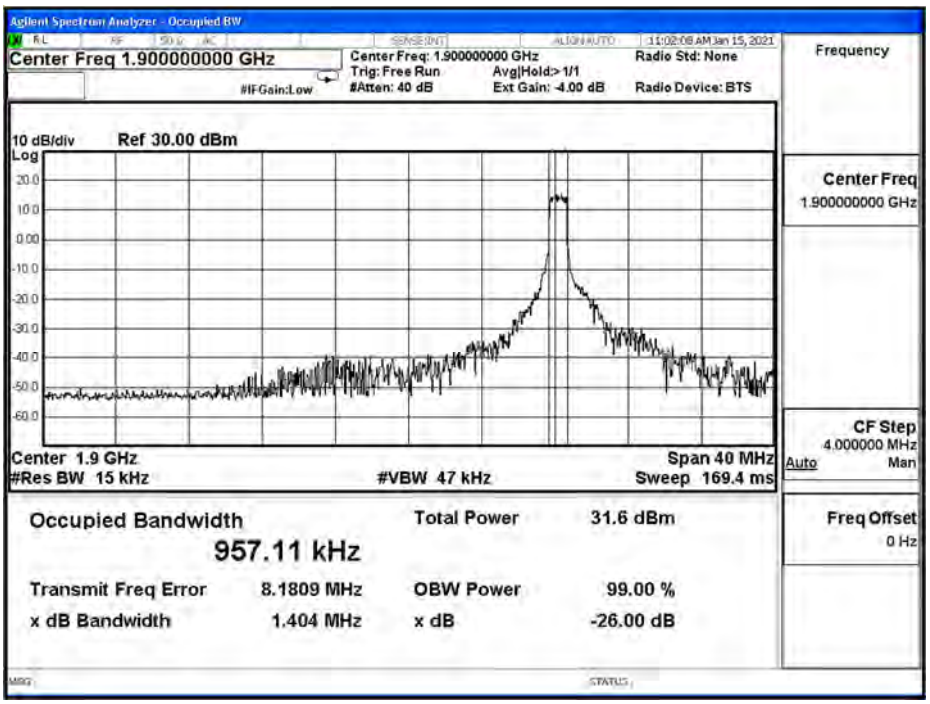
CAT-M1_B2_CH18900_20M_16-QAM_5RB0



CAT-M1_B2_CH19100_20M__QPSK_6RB0



CAT-M1_B2_CH19100_20M_16-QAM_5RB1

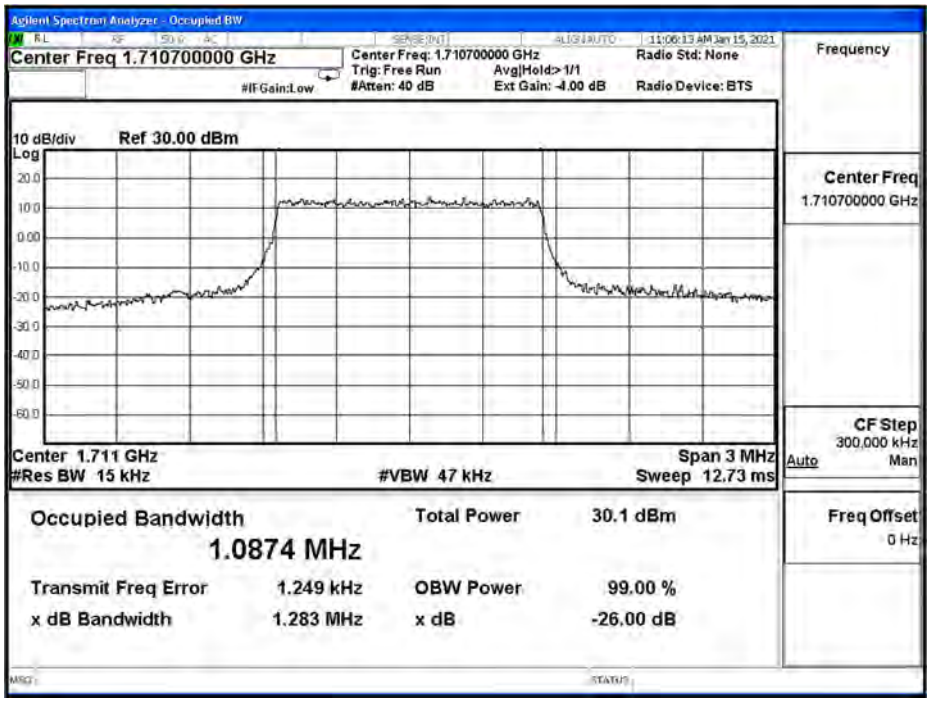


Product	Connectivity Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 2: Band4 Link		
Date of Test	2021/01/15	Test Site	SR12-H
Temperature (°C)	24	Humidity (%RH)	60

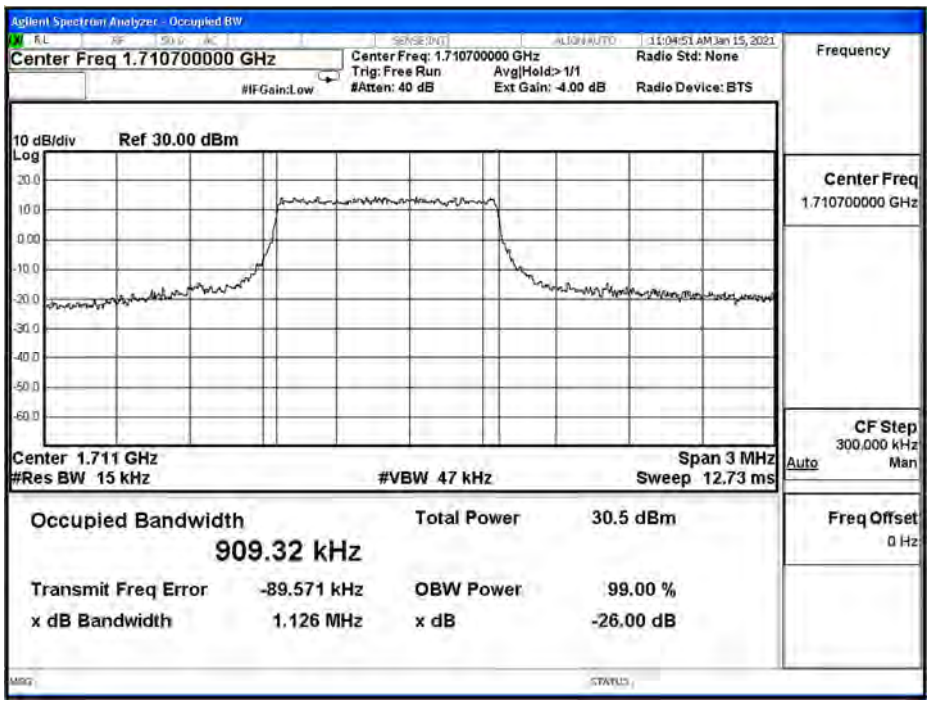
Bandwidth (MHz)	Modulation	Frequency (MHz)	Measure Level (MHz)		Limit (MHz)
			26dB BW	99% BW	
1.4M	QPSK	1710.7	1.283	1.087	N/A
		1732.5	1.308	1.085	N/A
		1754.3	1.271	1.084	N/A
	16-QAM	1710.7	1.126	0.909	N/A
		1732.5	1.111	0.910	N/A
		1754.3	1.081	0.910	N/A
3M	QPSK	1711.5	1.386	1.098	N/A
		1732.5	1.350	1.095	N/A
		1753.5	1.416	1.101	N/A
	16-QAM	1711.5	1.318	0.926	N/A
		1732.5	1.358	0.926	N/A
		1753.5	1.219	0.924	N/A
5M	QPSK	1712.5	1.377	1.100	N/A
		1732.5	1.363	1.102	N/A
		1753.5	1.369	1.102	N/A
	16-QAM	1712.5	1.235	0.930	N/A
		1732.5	1.246	0.937	N/A
		1753.5	1.272	0.930	N/A
10M	QPSK	1715.0	1.487	1.116	N/A
		1732.5	1.544	1.121	N/A
		1750.0	1.492	1.116	N/A
	16-QAM	1715.0	1.298	0.951	N/A
		1732.5	1.522	0.950	N/A
		1750.0	1.328	0.945	N/A
15M	QPSK	1717.5	1.630	1.132	N/A
		1732.5	1.628	1.148	N/A
		1747.5	1.452	1.137	N/A
	16-QAM	1717.5	1.494	0.982	N/A
		1732.5	1.468	0.978	N/A
		1747.5	1.321	0.971	N/A

Bandwidth (MHz)	Modulation	Frequency (MHz)	Measure Level (MHz)		Limit (MHz)
			26dB BW	99% BW	
20M	QPSK	1720.0	1.635	1.119	N/A
		1732.5	1.708	1.110	N/A
		1745.0	1.594	1.123	N/A
	16-QAM	1720.0	1.361	0.970	N/A
		1732.5	1.481	0.967	N/A
		1745.0	1.450	0.957	N/A

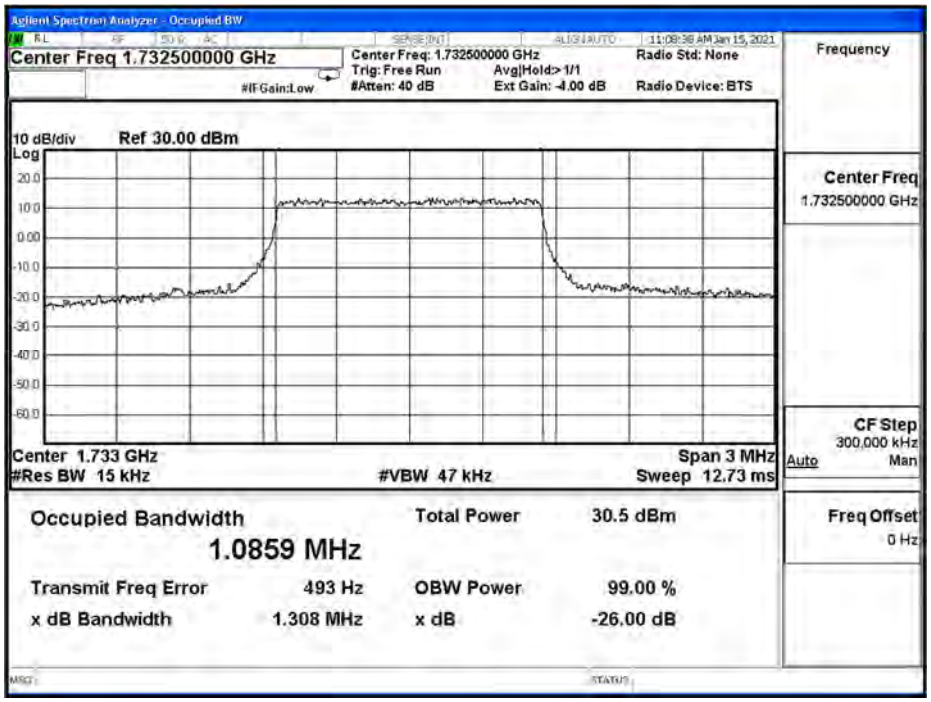
CAT-M1_B4_CH19957_1.4M__QPSK_6RB0



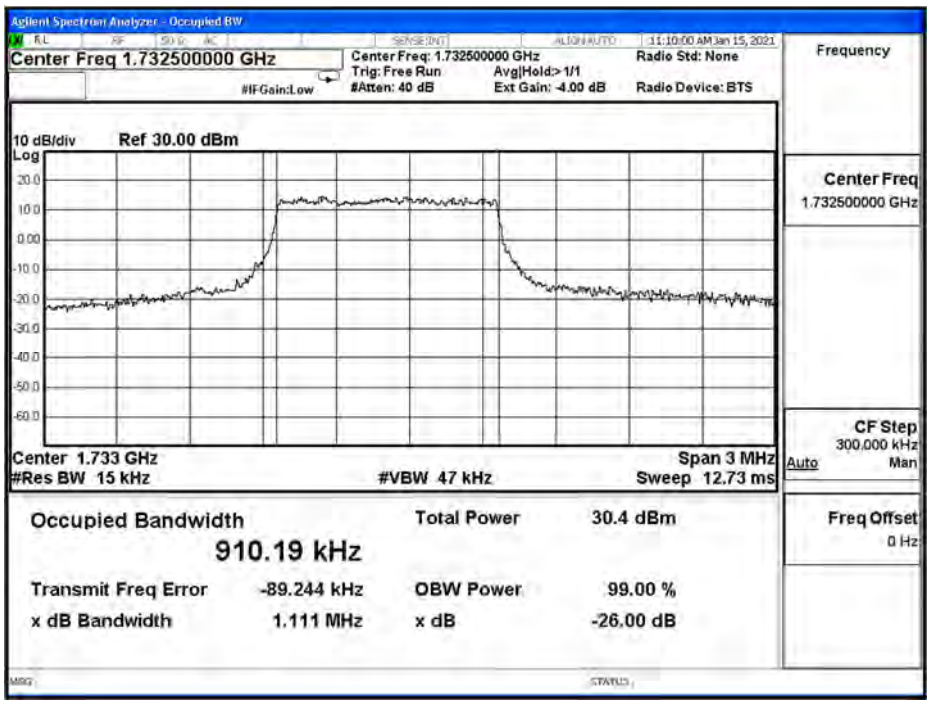
CAT-M1_B4_CH19957_1.4M_16-QAM_5RB0



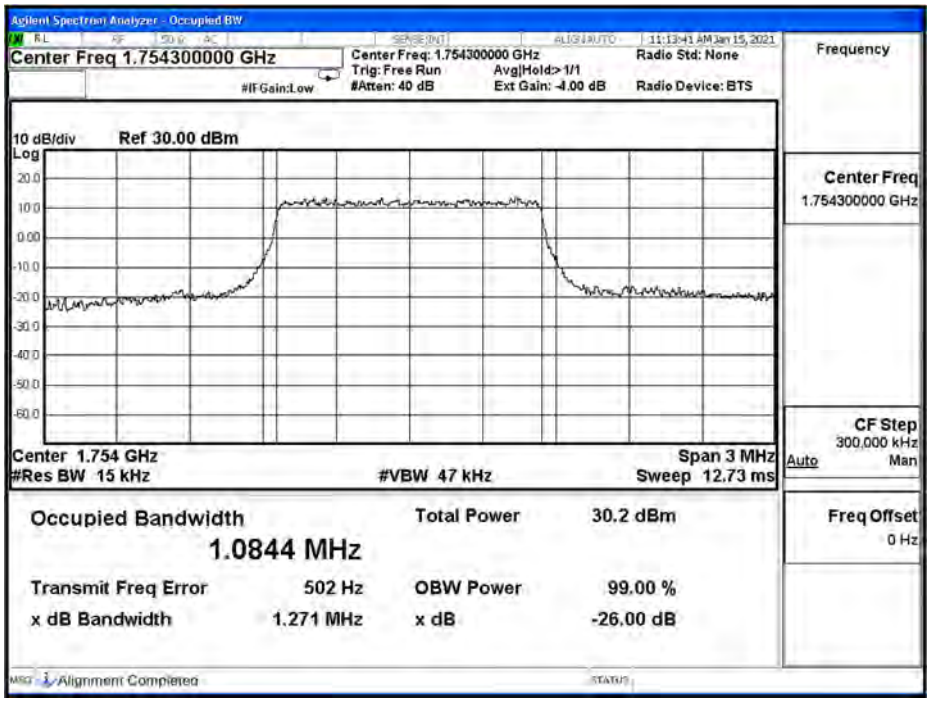
CAT-M1_B4_CH20175_1.4M__QPSK_6RB0



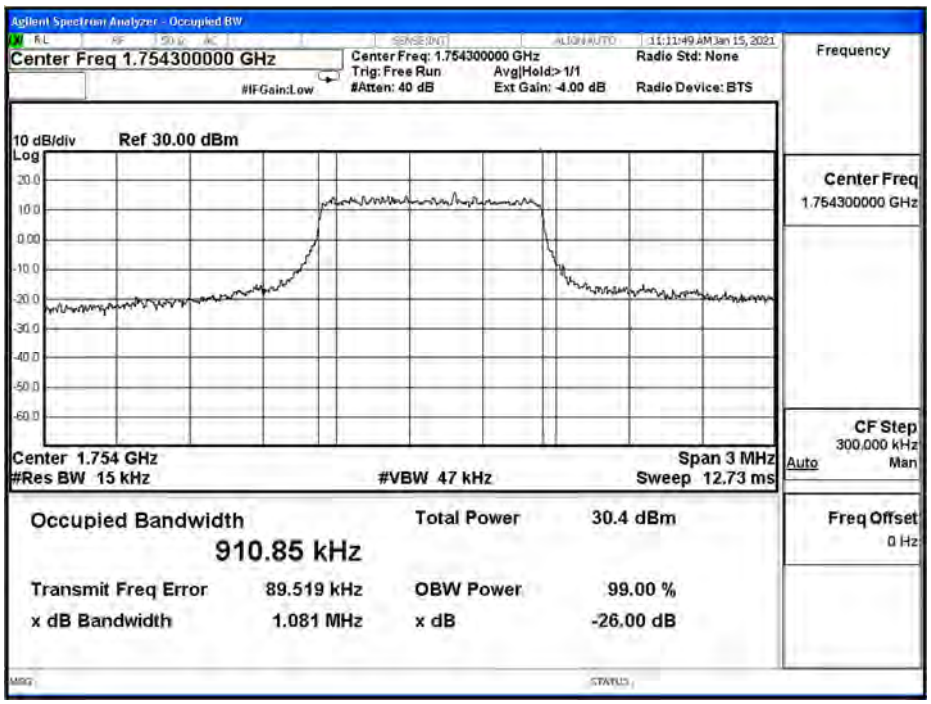
CAT-M1_B4_CH20175_1.4M_16-QAM_5RB0



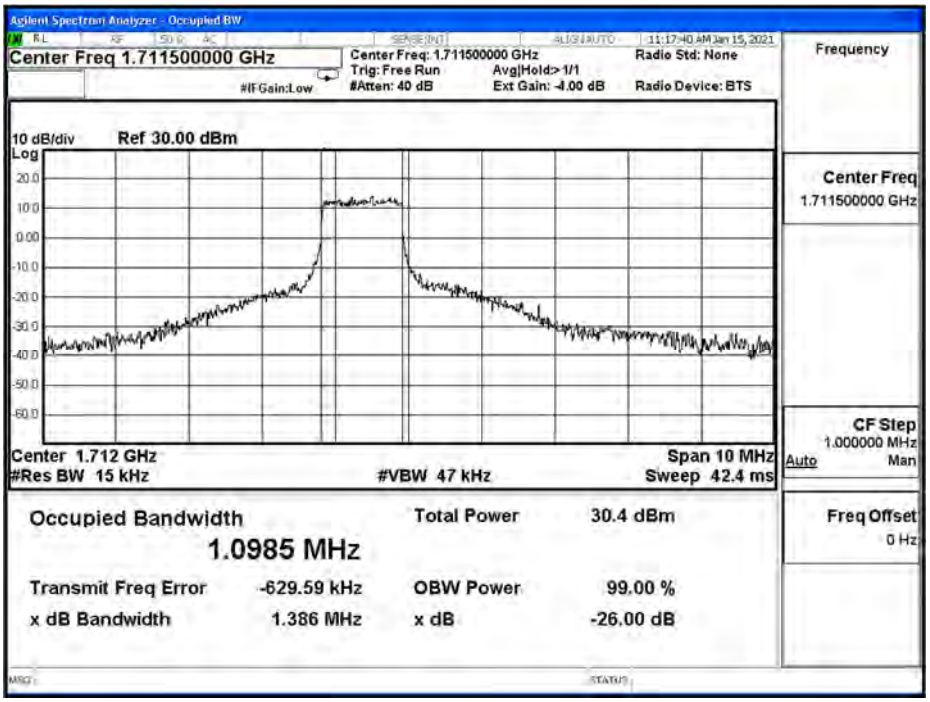
CAT-M1_B4_CH20393_1.4M__QPSK_6RB0



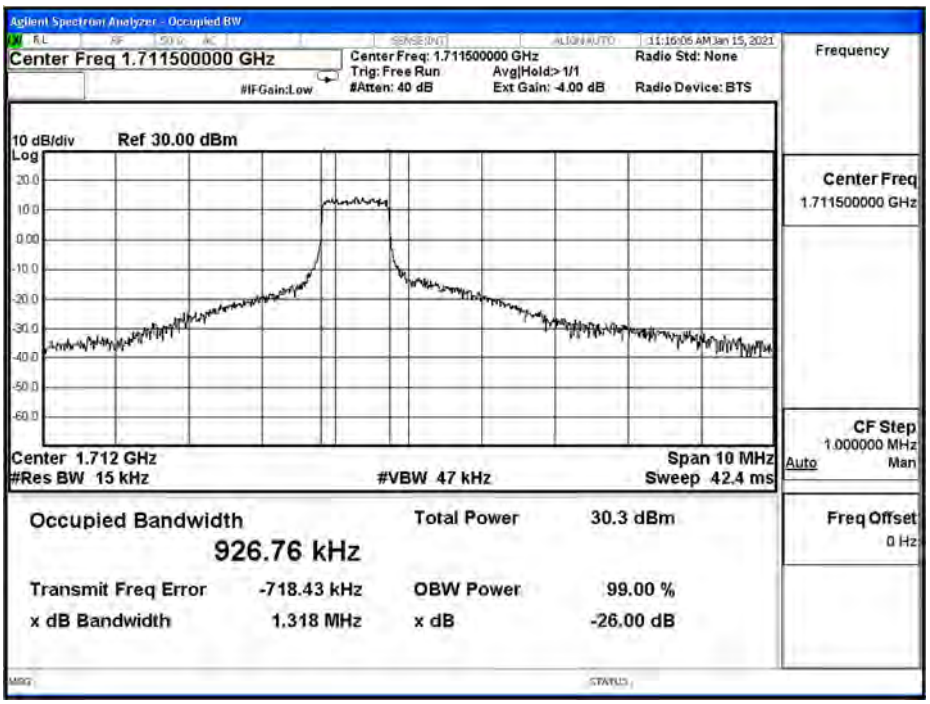
CAT-M1_B4_CH20393_1.4M_16-QAM_5RB1



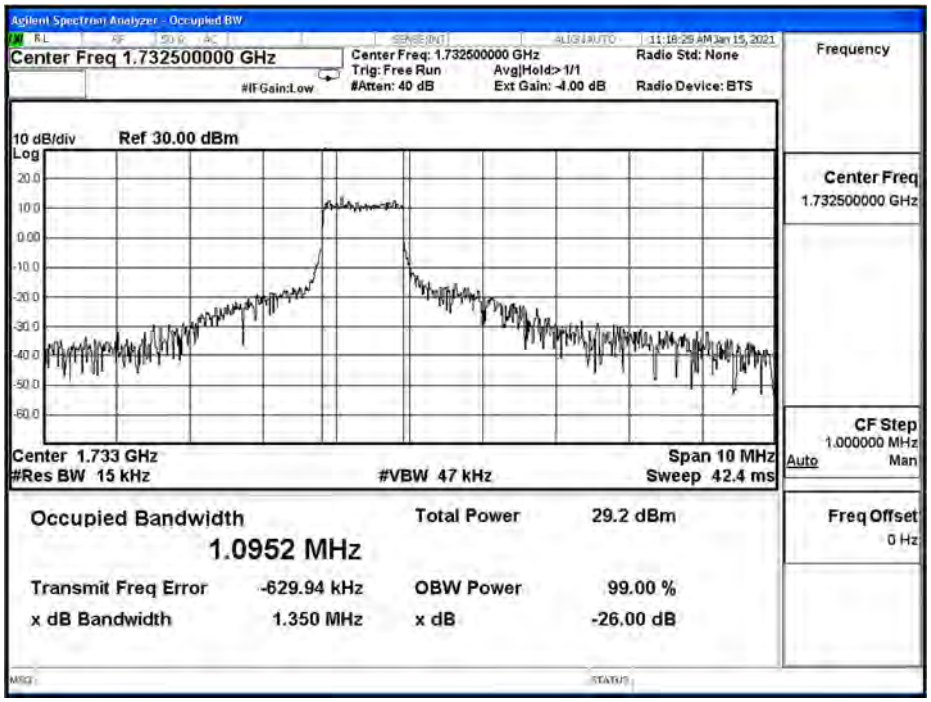
CAT-M1_B4_CH19965_3M__QPSK_6RB0



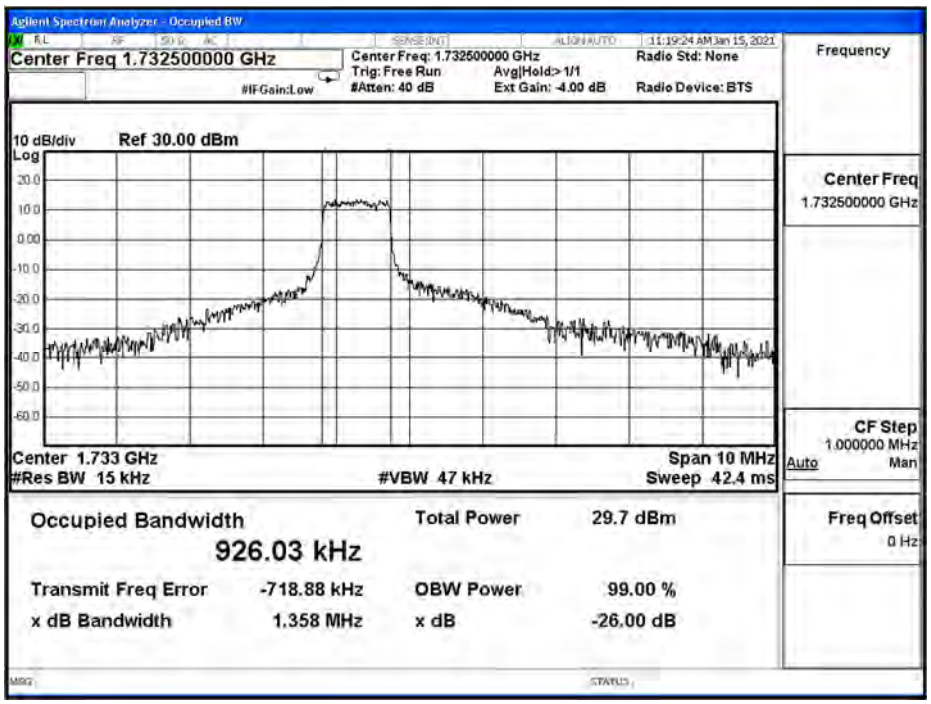
CAT-M1_B4_CH19965_3M_16-QAM_5RB0



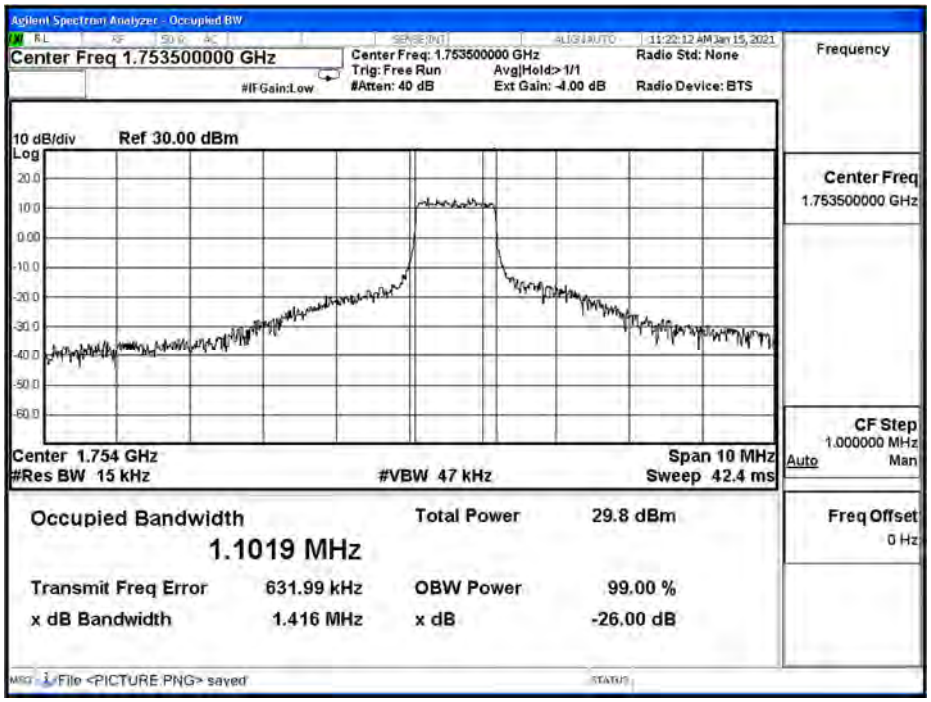
CAT-M1_B4_CH20175_3M__QPSK_6RB0



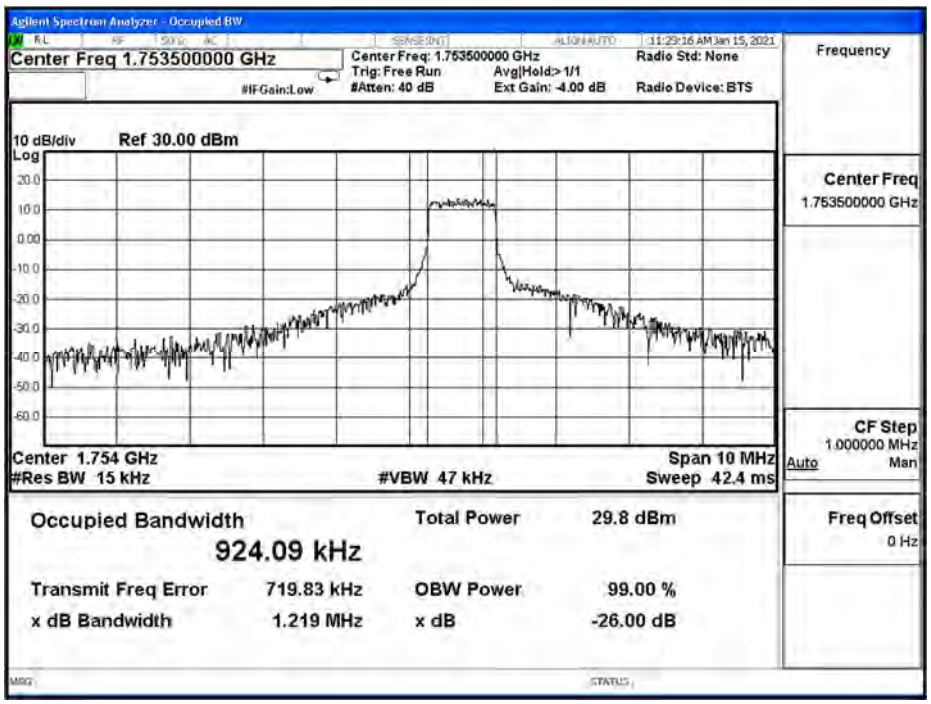
CAT-M1_B4_CH20175_3M_16-QAM_5RB0



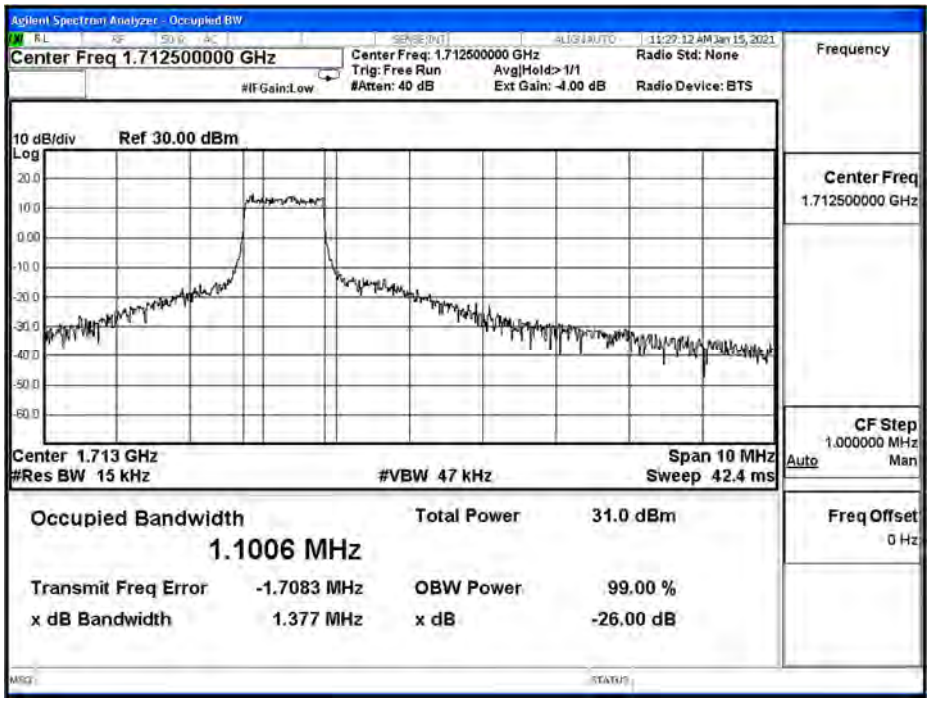
CAT-M1_B4_CH20385_3M__QPSK_6RB0



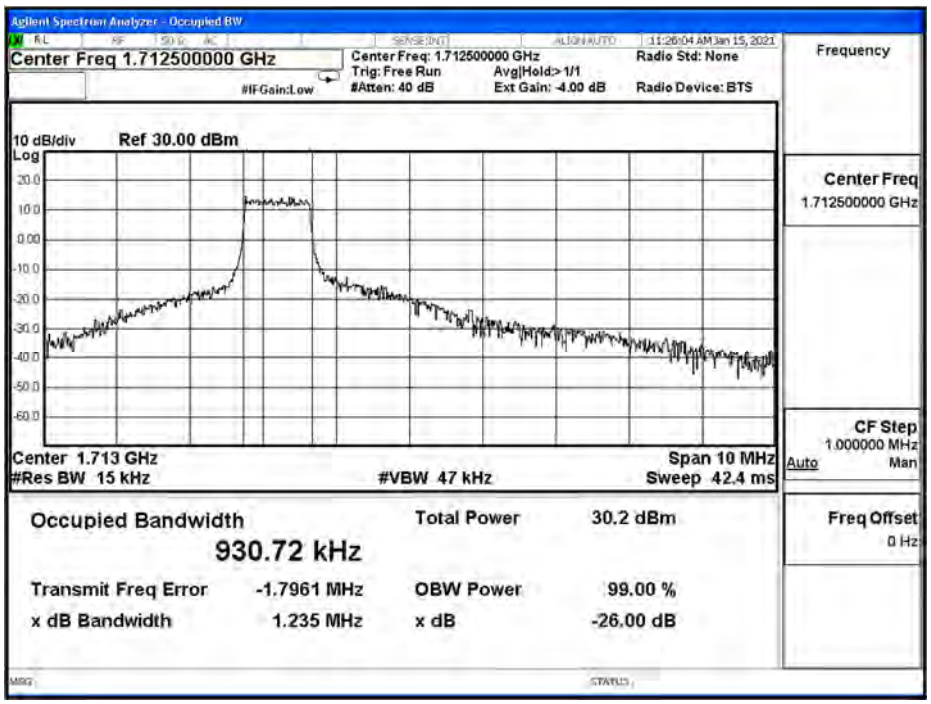
CAT-M1_B4_CH20385_3M_16-QAM_5RB1



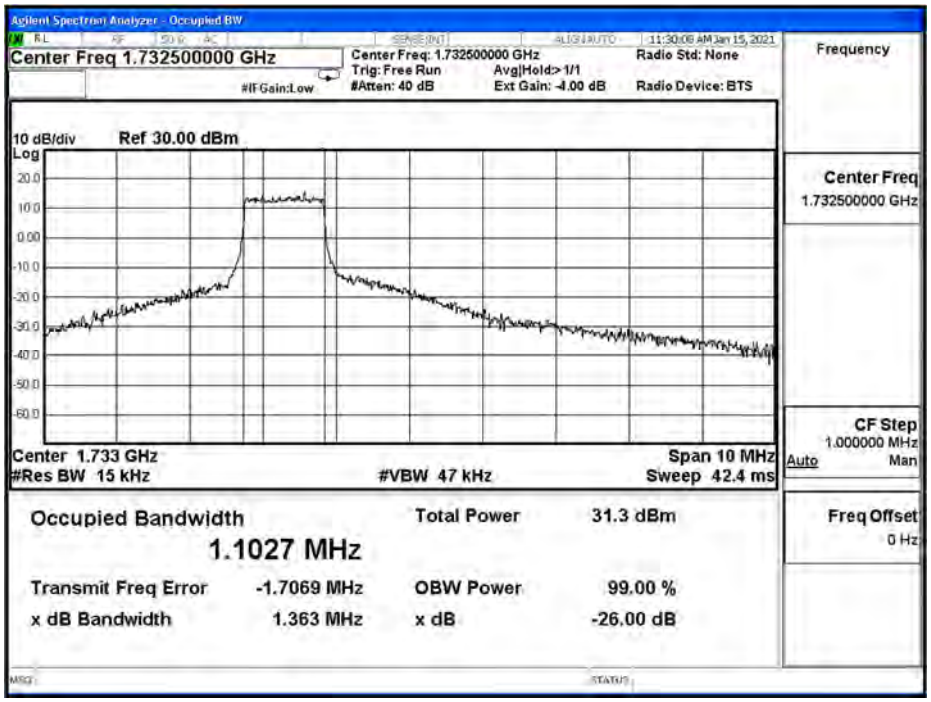
CAT-M1_B4_CH19975_5M__QPSK_6RB0



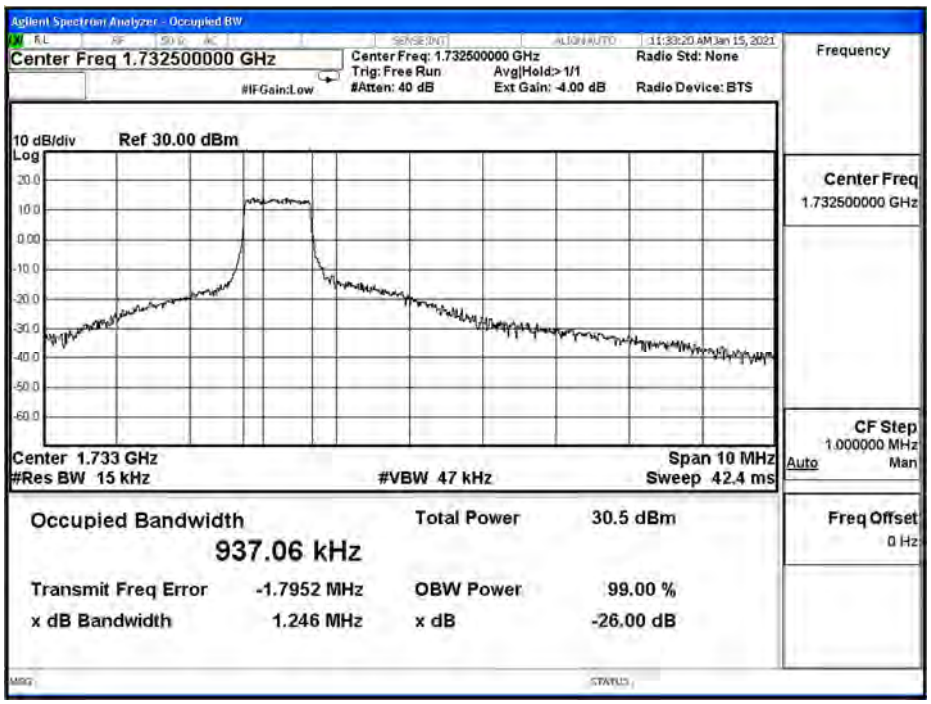
CAT-M1_B4_CH19975_5M_16-QAM_5RB0



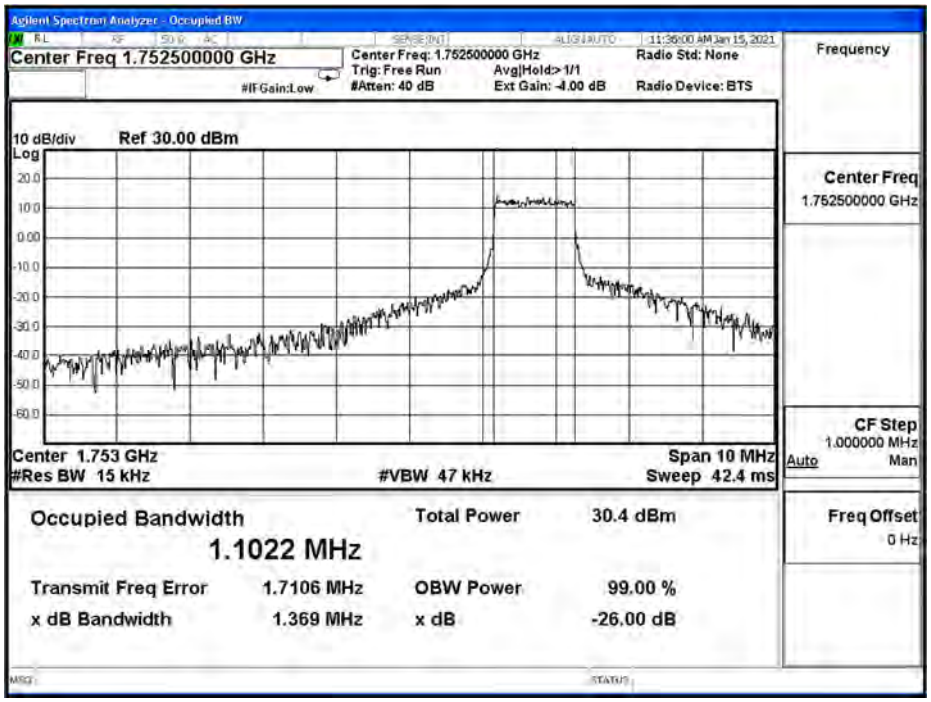
CAT-M1_B4_CH20175_5M__QPSK_6RB0



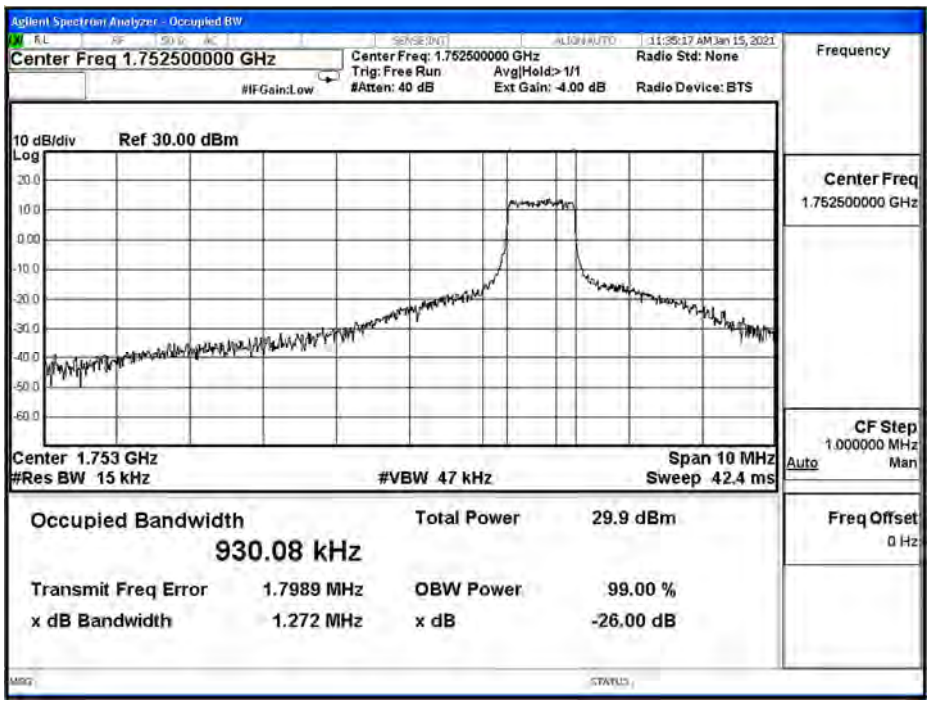
CAT-M1_B4_CH20175_5M_16-QAM_5RB0



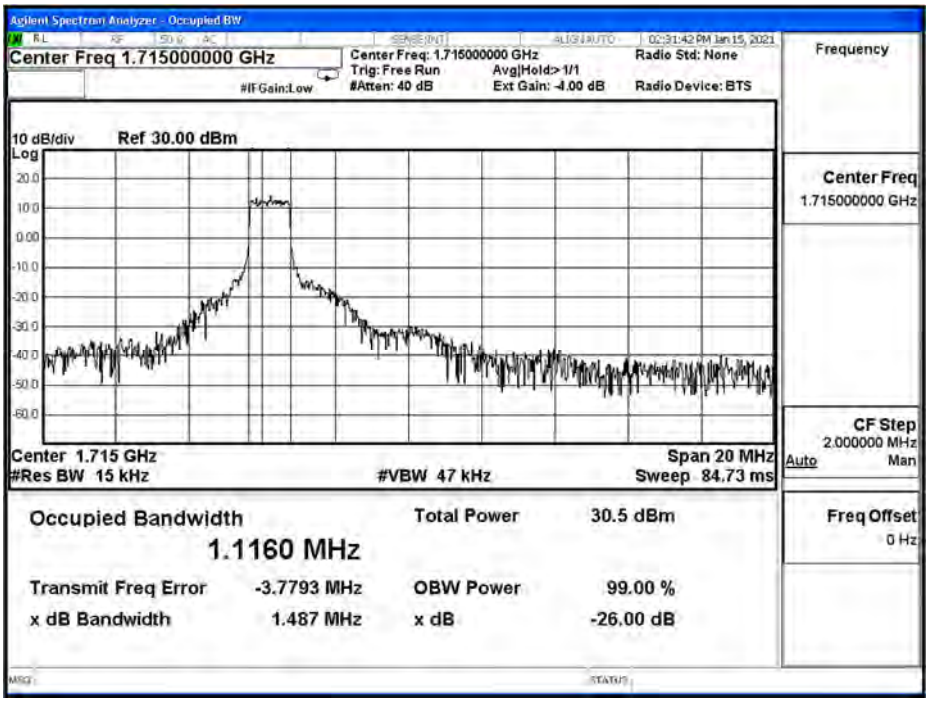
CAT-M1_B4_CH20375_5M__QPSK_6RB0



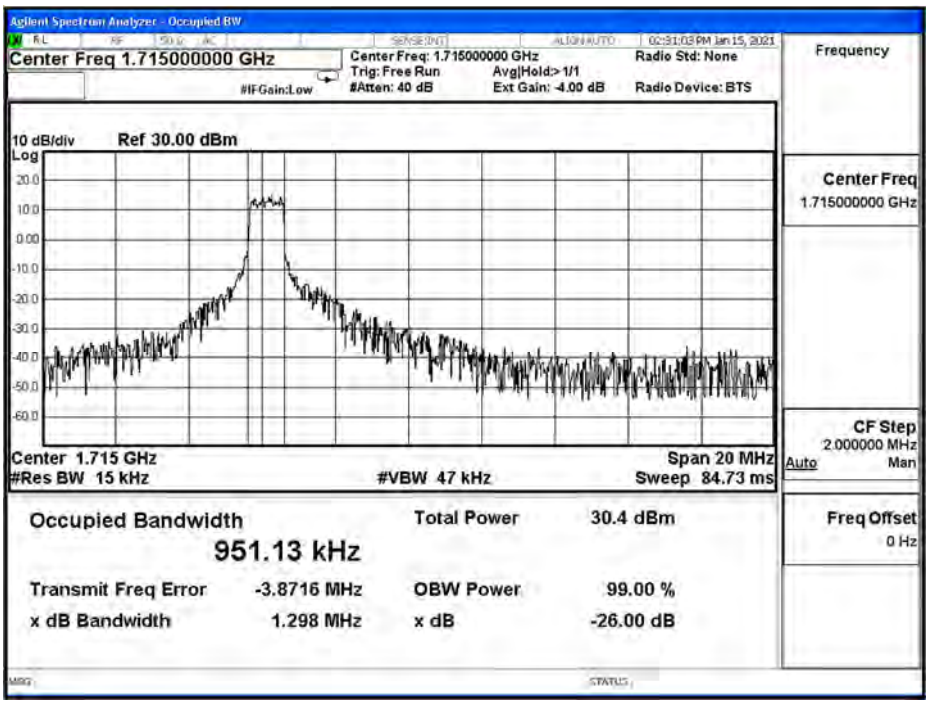
CAT-M1_B4_CH20375_5M_16-QAM_5RB1



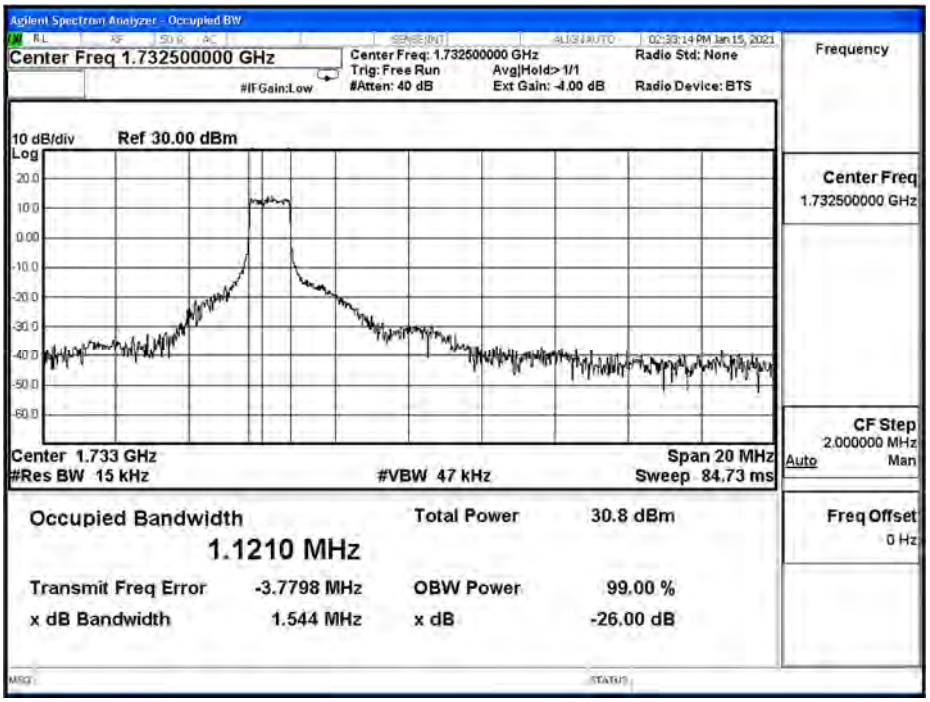
CAT-M1_B4_CH20000_10M__QPSK_6RB0



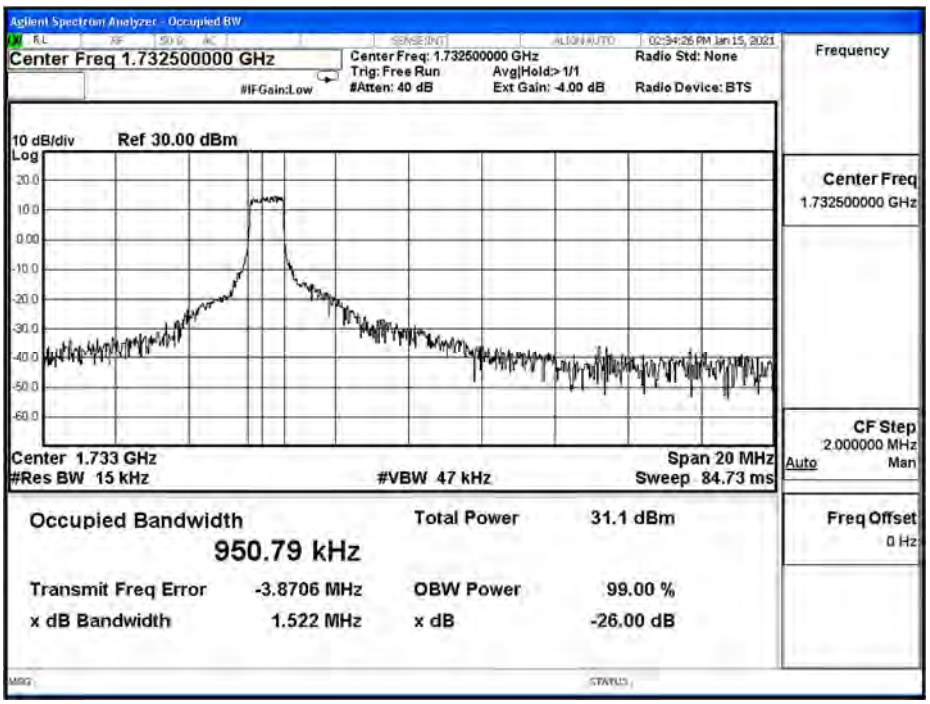
CAT-M1_B4_CH20000_10M_16-QAM_5RB0



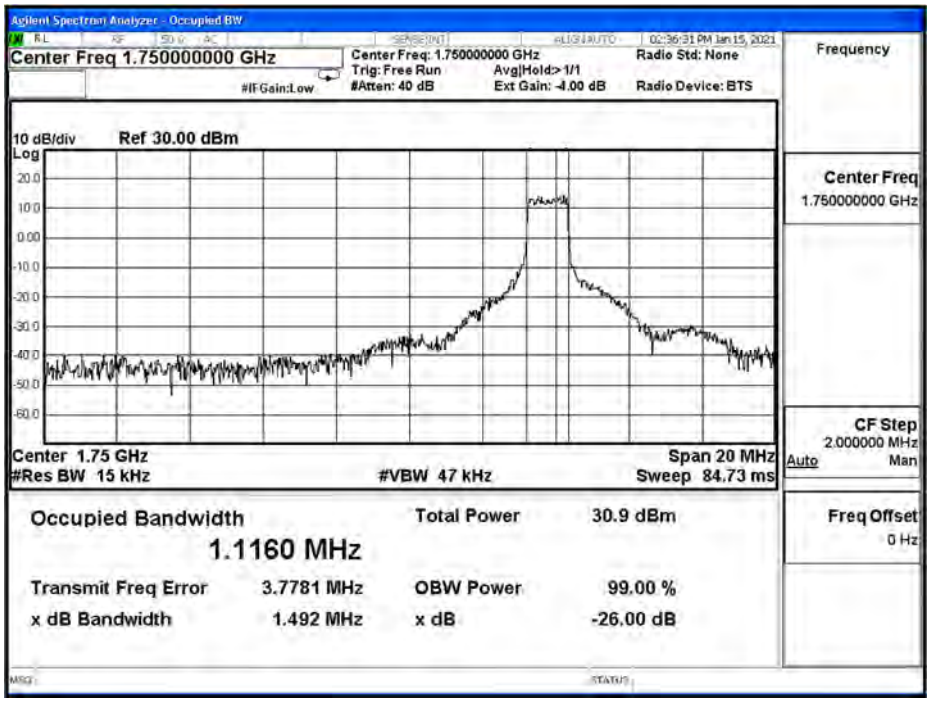
CAT-M1_B4_CH20175_10M__QPSK_6RB0



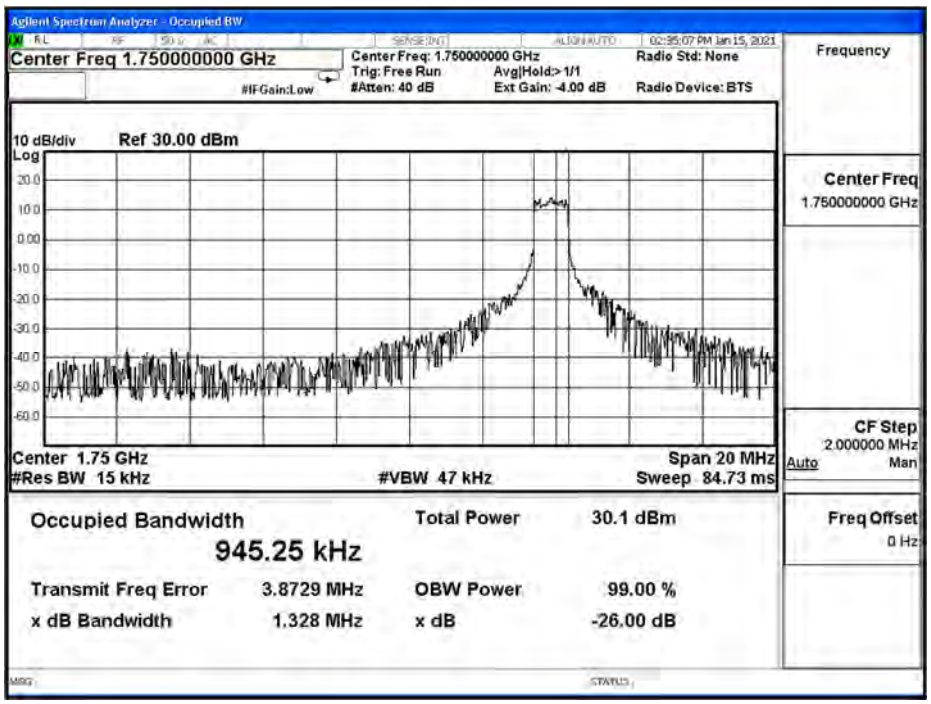
CAT-M1_B4_CH20175_10M_16-QAM_5RB0



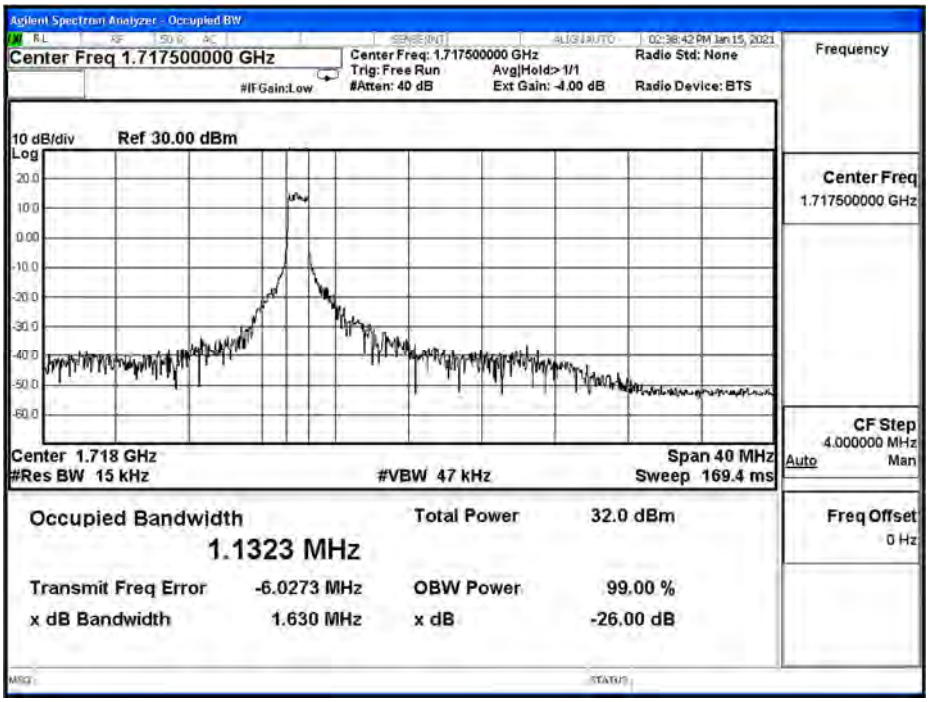
CAT-M1_B4_CH20350_10M__QPSK_6RB0



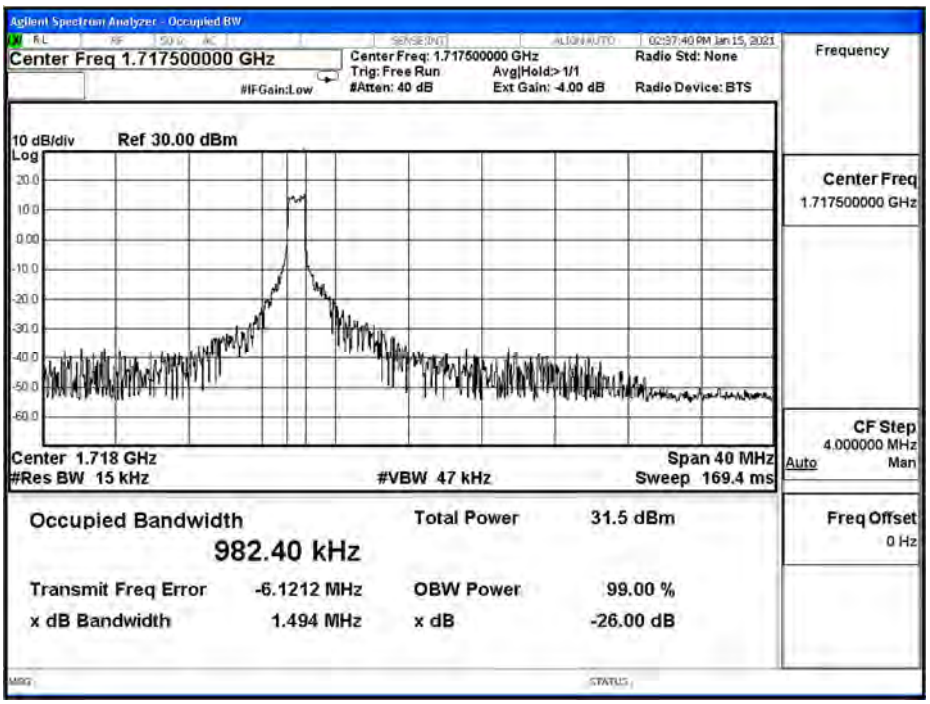
CAT-M1_B4_CH20350_10M_16-QAM_5RB1



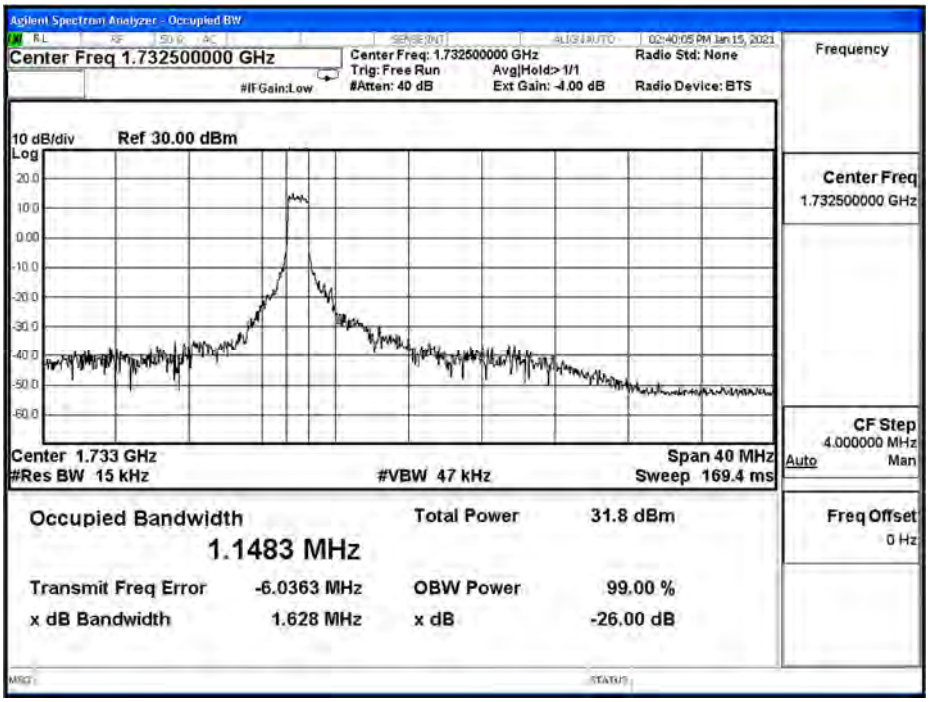
CAT-M1_B4_CH20025_15M__QPSK_6RB0



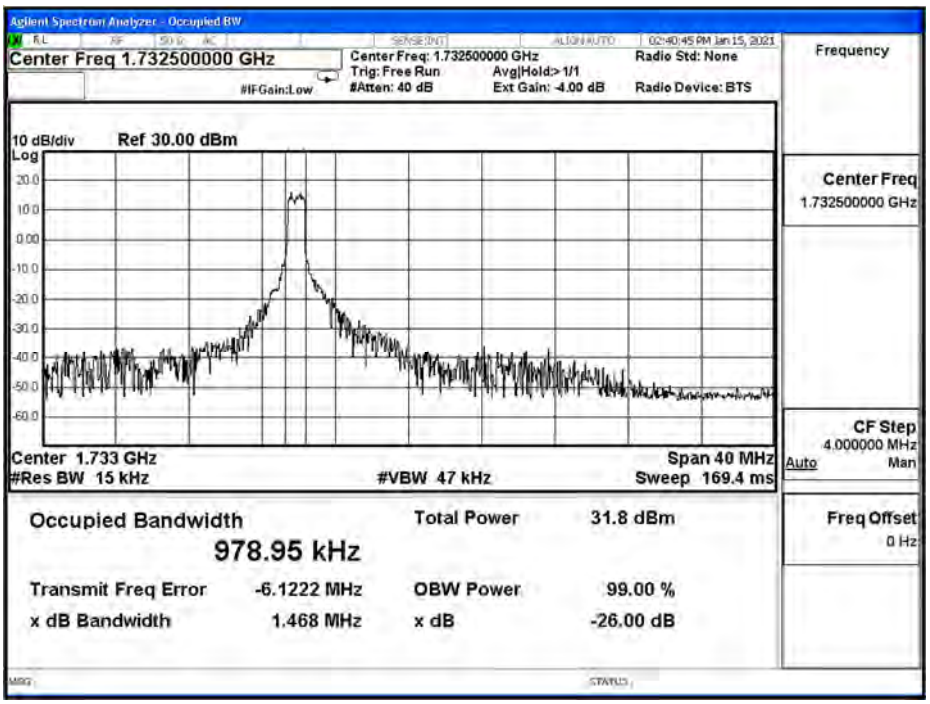
CAT-M1_B4_CH20025_15M_16-QAM_5RB0



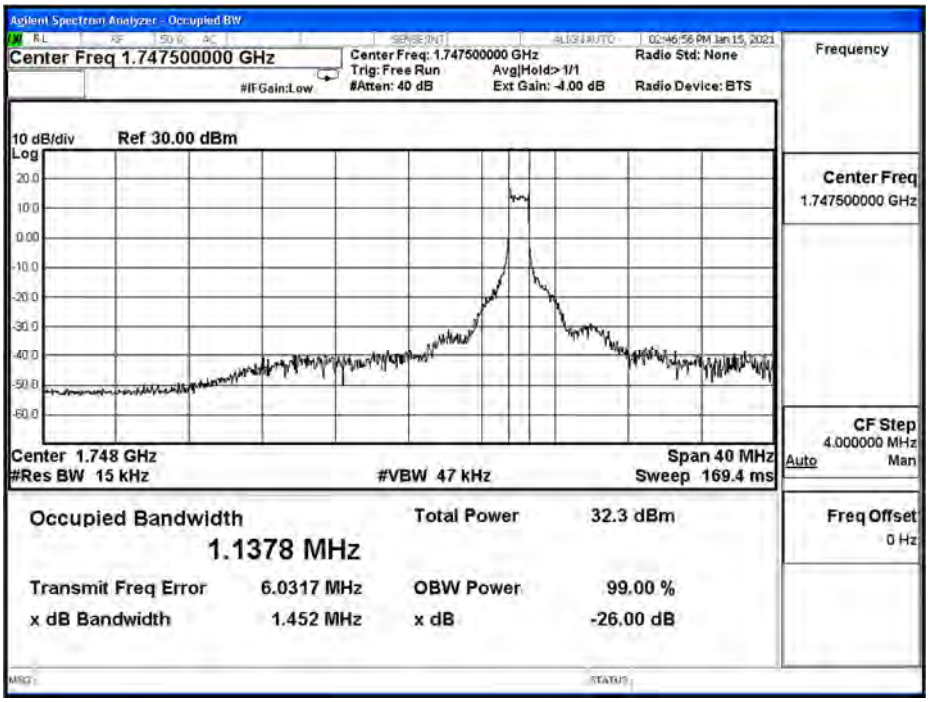
CAT-M1_B4_CH20175_15M__QPSK_6RB0



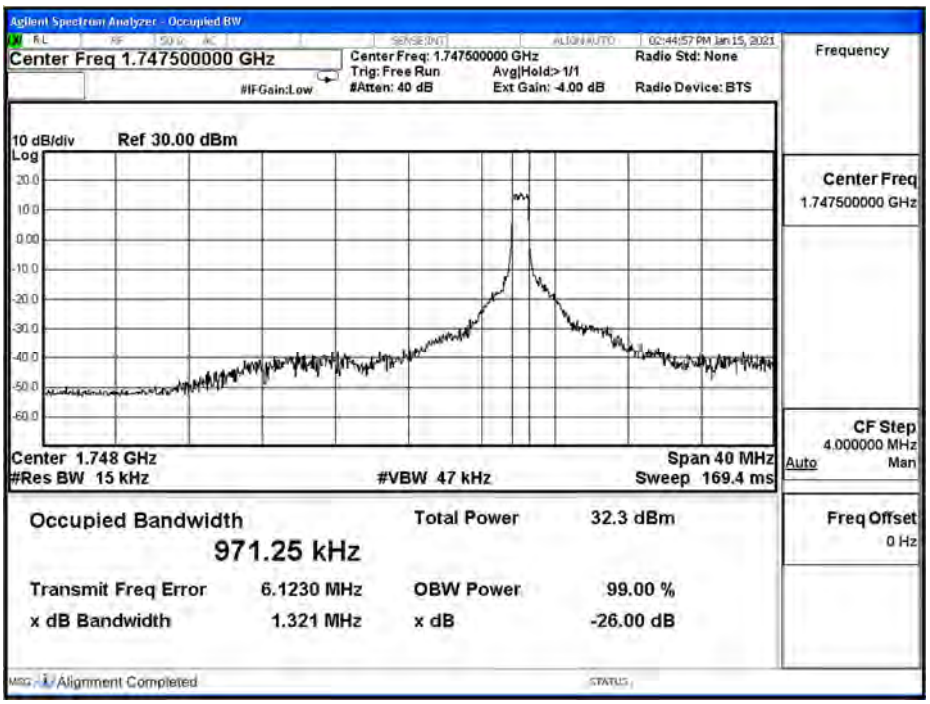
CAT-M1_B4_CH20175_15M_16-QAM_5RB0



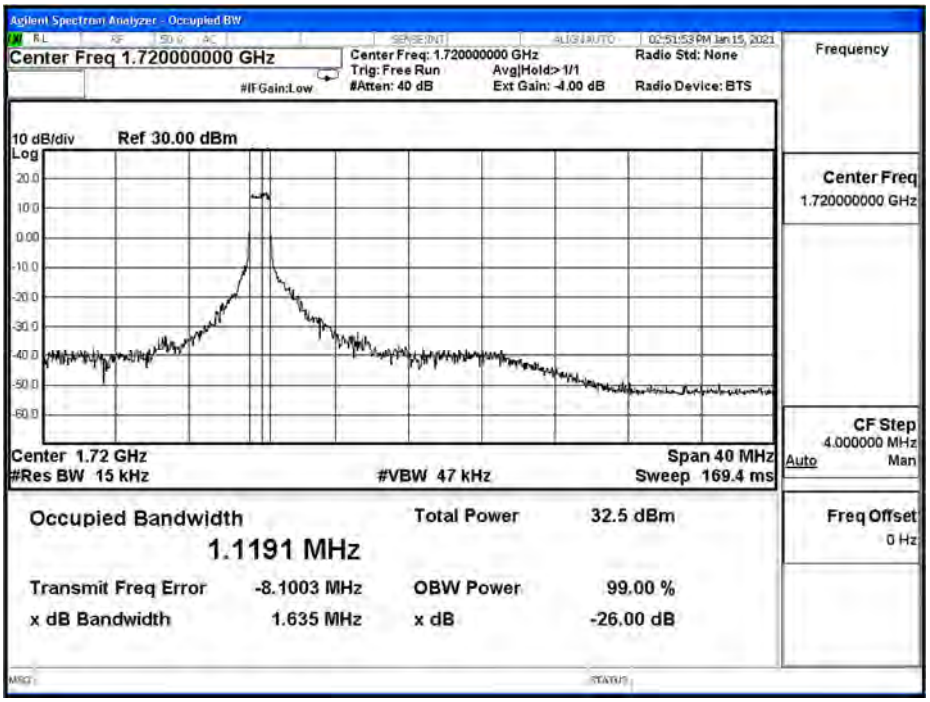
CAT-M1_B4_CH20325_15M__QPSK_6RB0



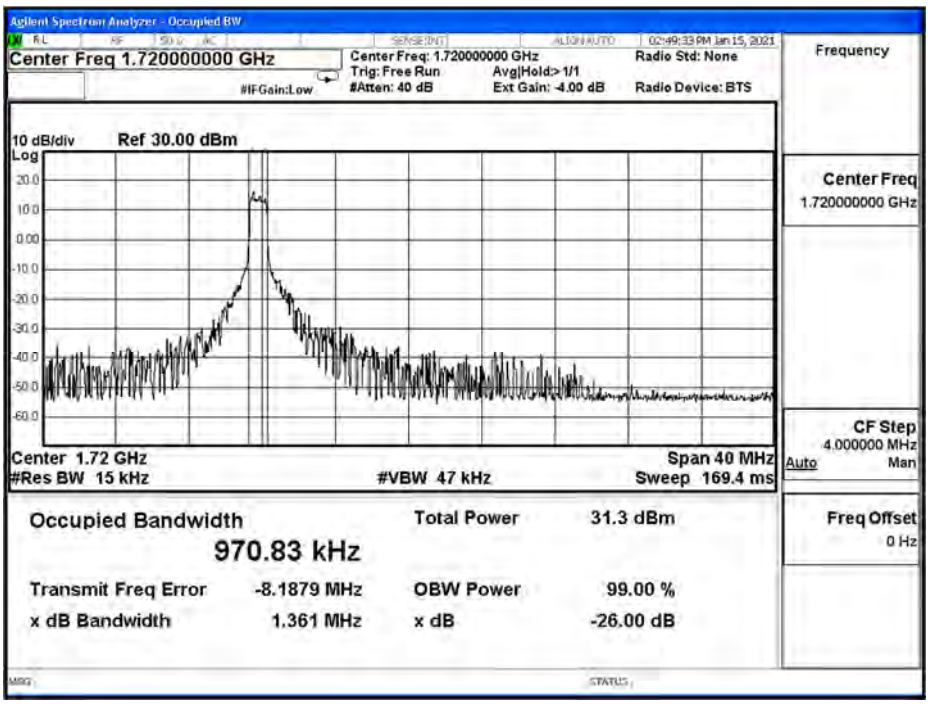
CAT-M1_B4_CH20325_15M_16-QAM_5RB1



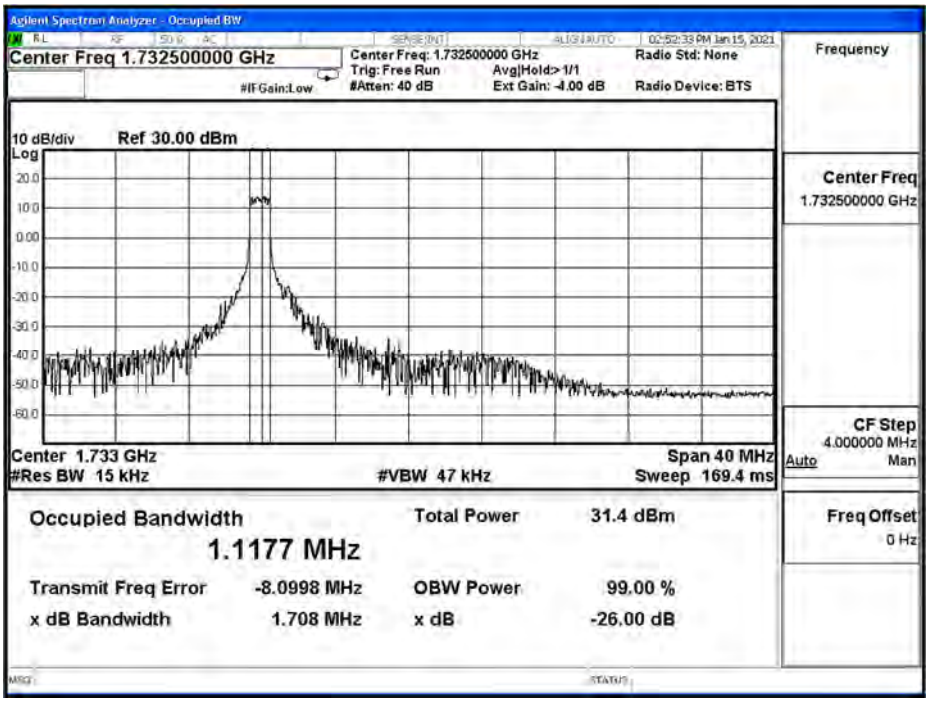
CAT-M1_B4_CH20050_20M__QPSK_6RB0



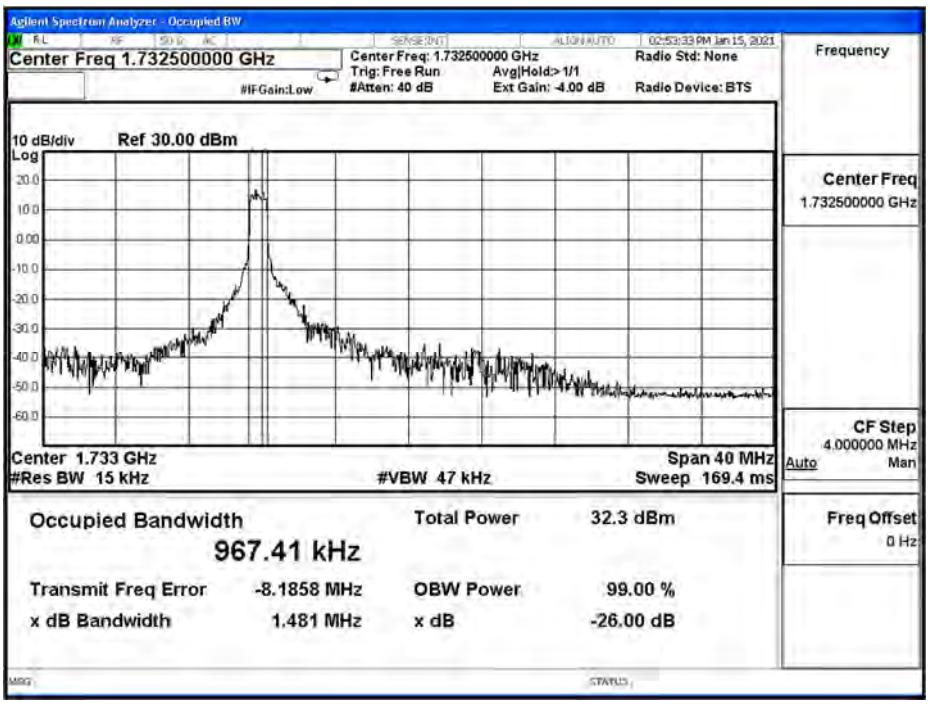
CAT-M1_B4_CH20050_20M_16-QAM_5RB0



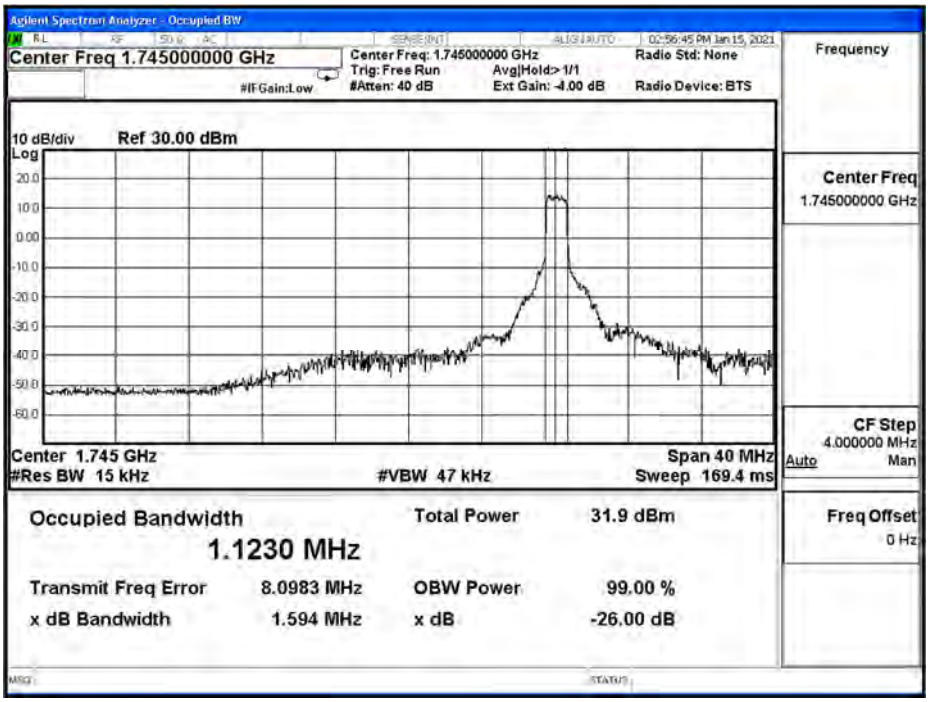
CAT-M1_B4_CH20175_20M__QPSK_6RB0



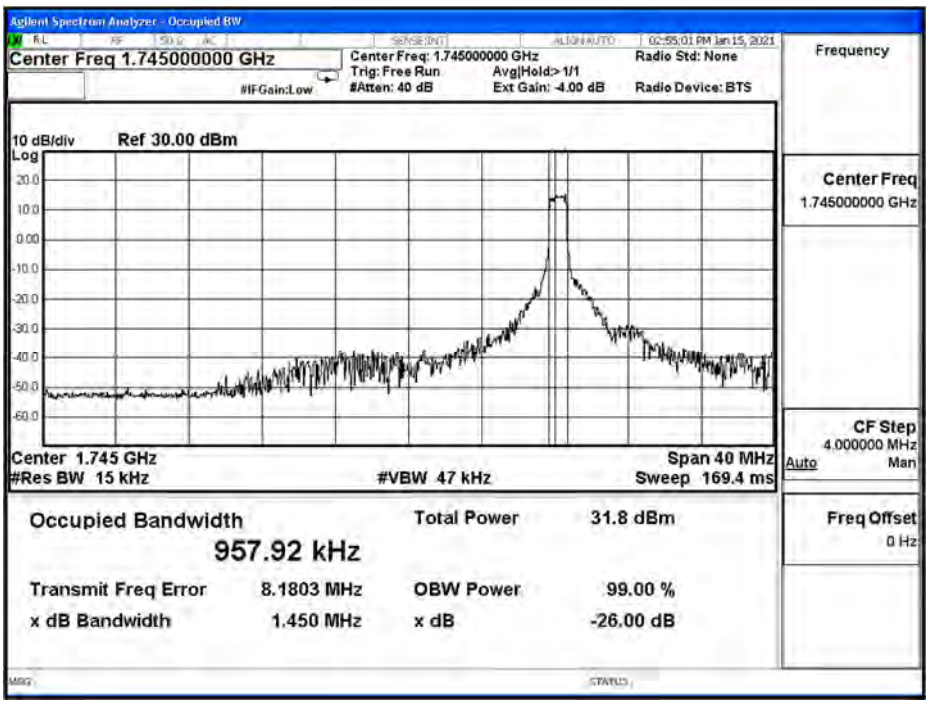
CAT-M1_B4_CH20175_20M_16-QAM_5RB0



CAT-M1_B4_CH20300_20M__QPSK_6RB0



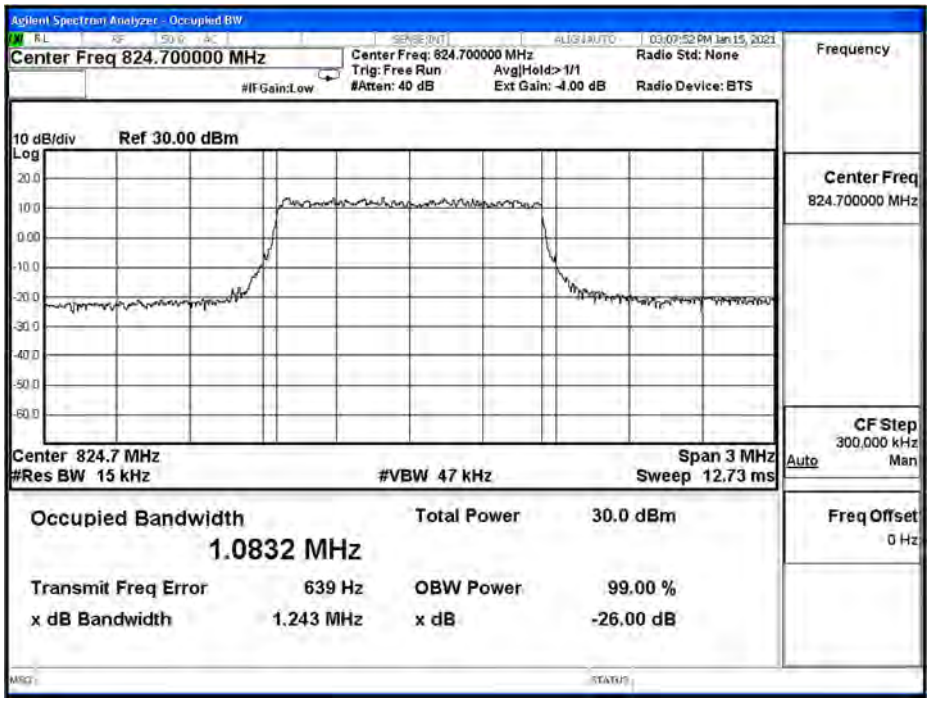
CAT-M1_B4_CH20300_20M_16-QAM_5RB1



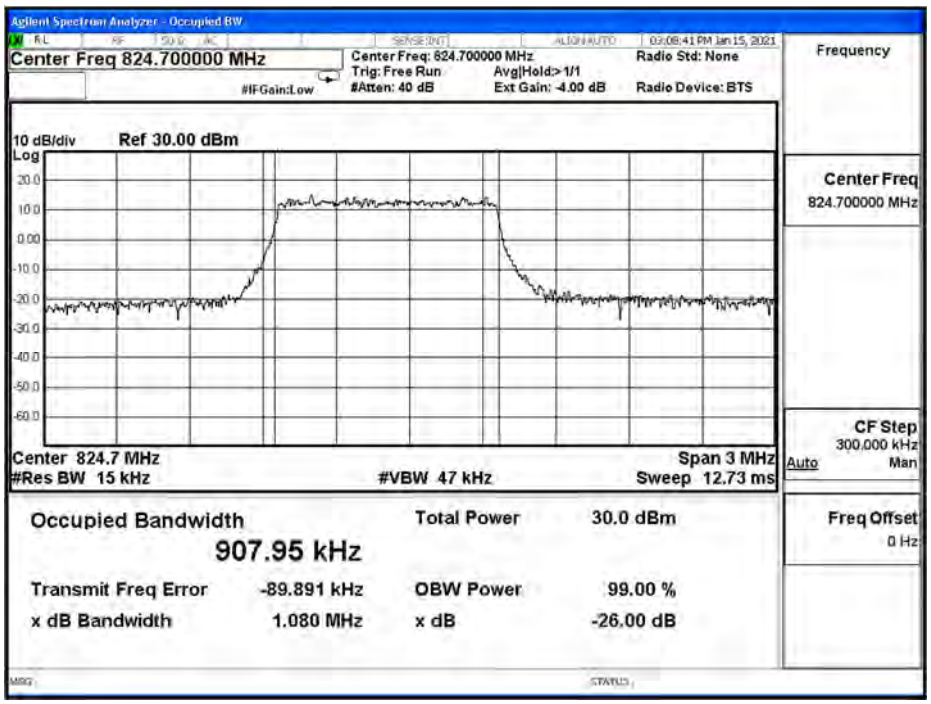
Product	Connectivity Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 3: Band5 Link		
Date of Test	2021/01/15	Test Site	SR12-H
Temperature (°C)	24	Humidity (%RH)	60

Bandwidth (MHz)	Modulation	Frequency (MHz)	Measure Level (MHz)		Limit (MHz)
			26dB BW	99% BW	
1.4M	QPSK	824.7	1.243	1.083	N/A
		836.5	1.253	1.084	N/A
		848.3	1.265	1.083	N/A
	16-QAM	824.7	1.080	0.907	N/A
		836.5	1.085	0.908	N/A
		848.3	1.067	0.905	N/A
3M	QPSK	825.5	1.364	1.092	N/A
		836.5	1.369	1.098	N/A
		847.5	1.378	1.097	N/A
	16-QAM	825.5	1.263	0.926	N/A
		836.5	1.211	0.921	N/A
		847.5	1.226	0.921	N/A
5M	QPSK	826.5	1.384	1.094	N/A
		836.5	1.378	1.100	N/A
		846.5	1.381	1.098	N/A
	16-QAM	826.5	1.216	0.926	N/A
		836.5	1.184	0.927	N/A
		846.5	1.137	0.926	N/A
10M	QPSK	829.0	1.376	1.098	N/A
		836.5	1.467	1.111	N/A
		844.0	1.468	1.105	N/A
	16-QAM	829.0	1.313	0.944	N/A
		836.5	1.293	0.937	N/A
		844.0	1.309	0.943	N/A

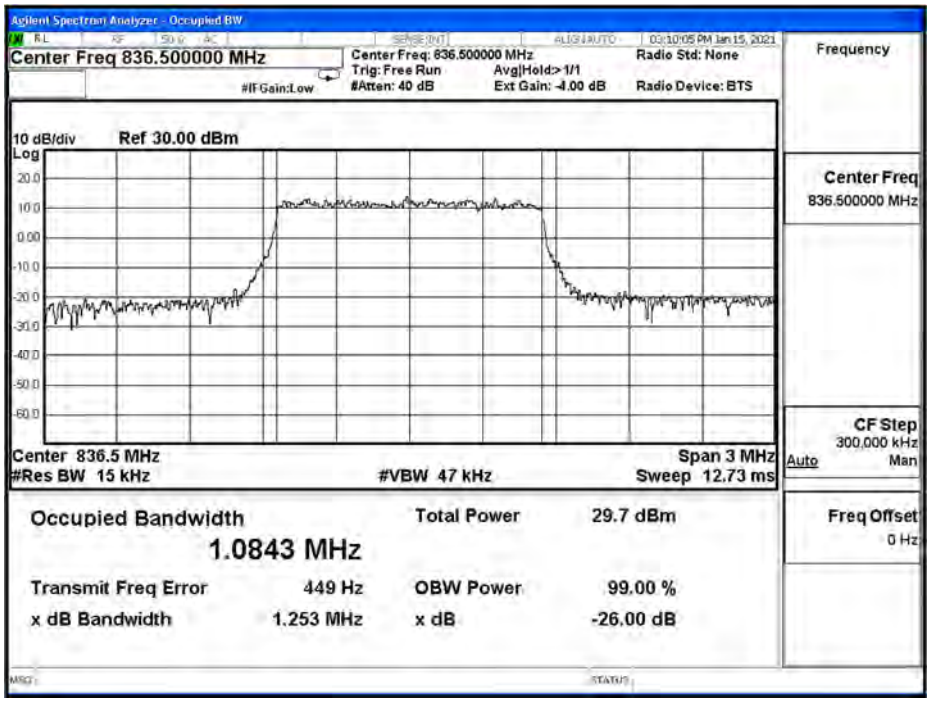
CAT-M1_B5_CH20407_1.4M__QPSK_6RB0



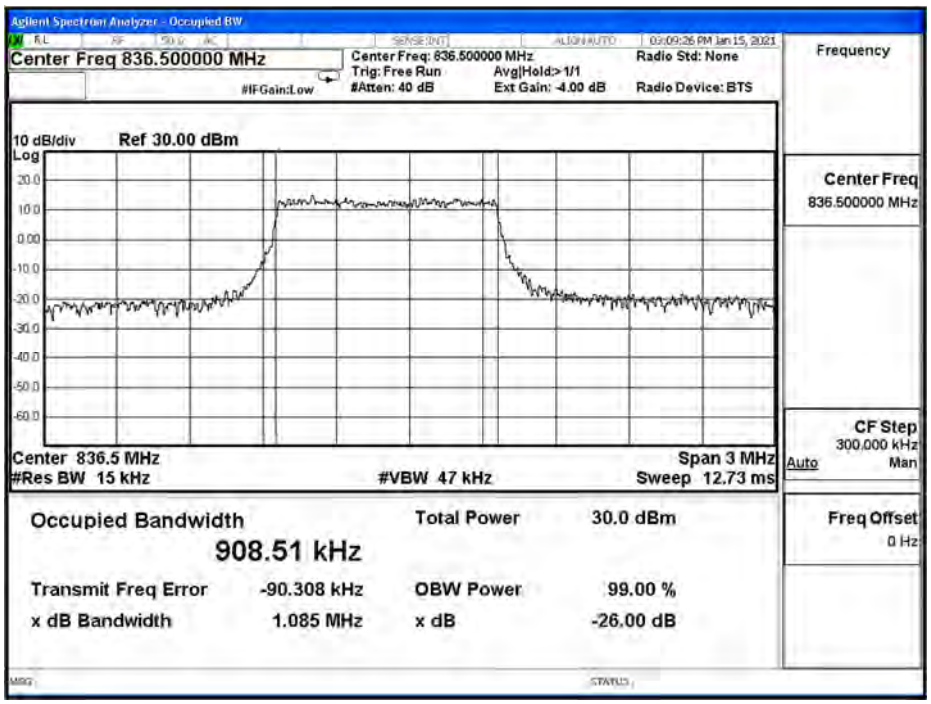
CAT-M1_B5_CH20407_1.4M_16-QAM_5RB0



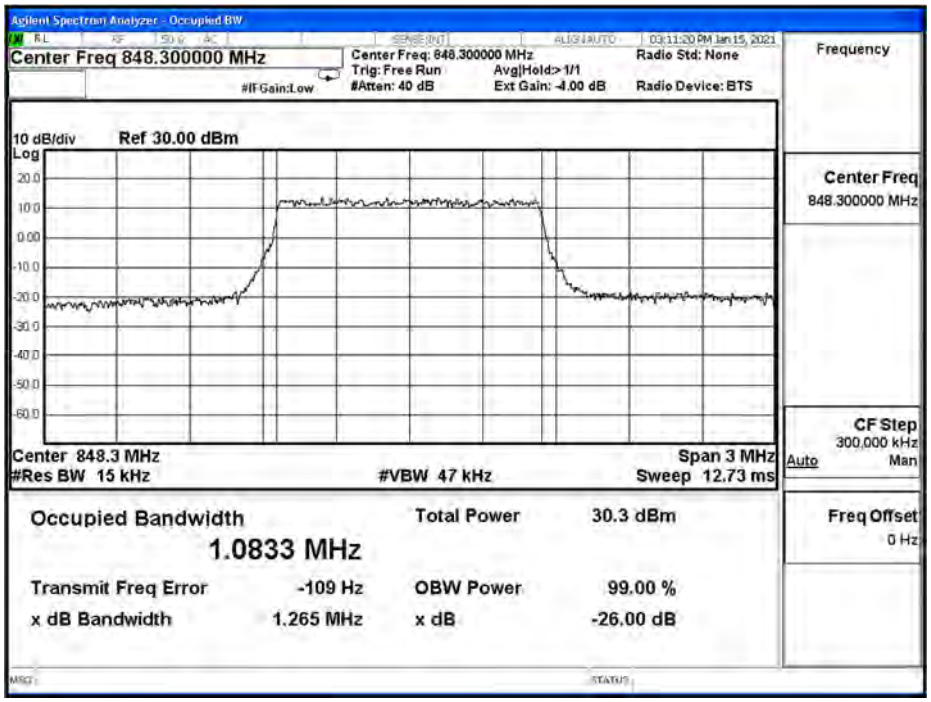
CAT-M1_B5_CH20525_1.4M__QPSK_6RB0



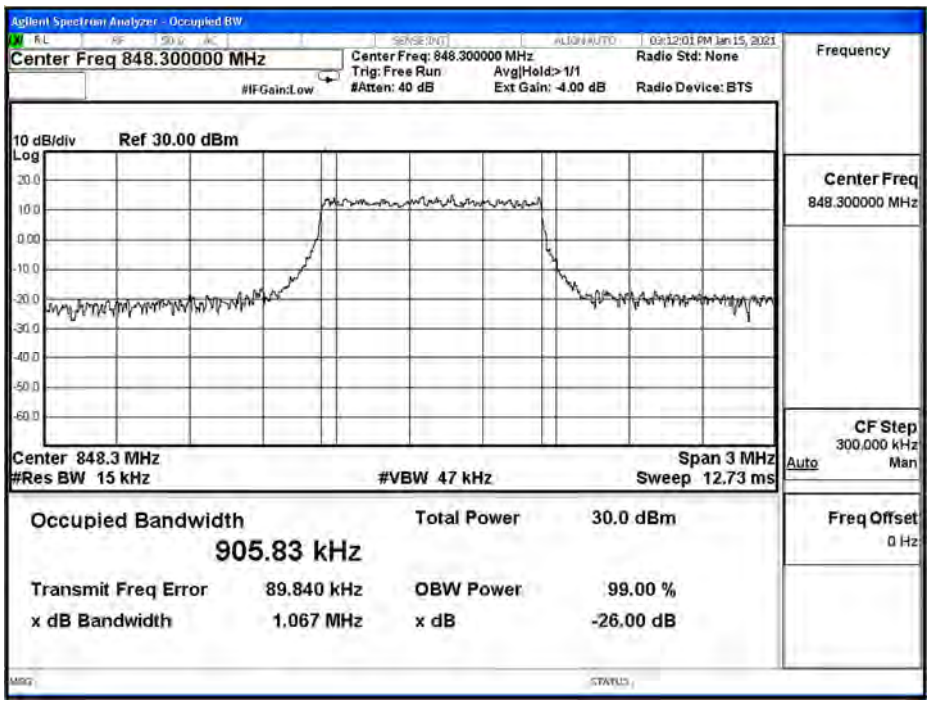
CAT-M1_B5_CH20525_1.4M_16-QAM_5RB0



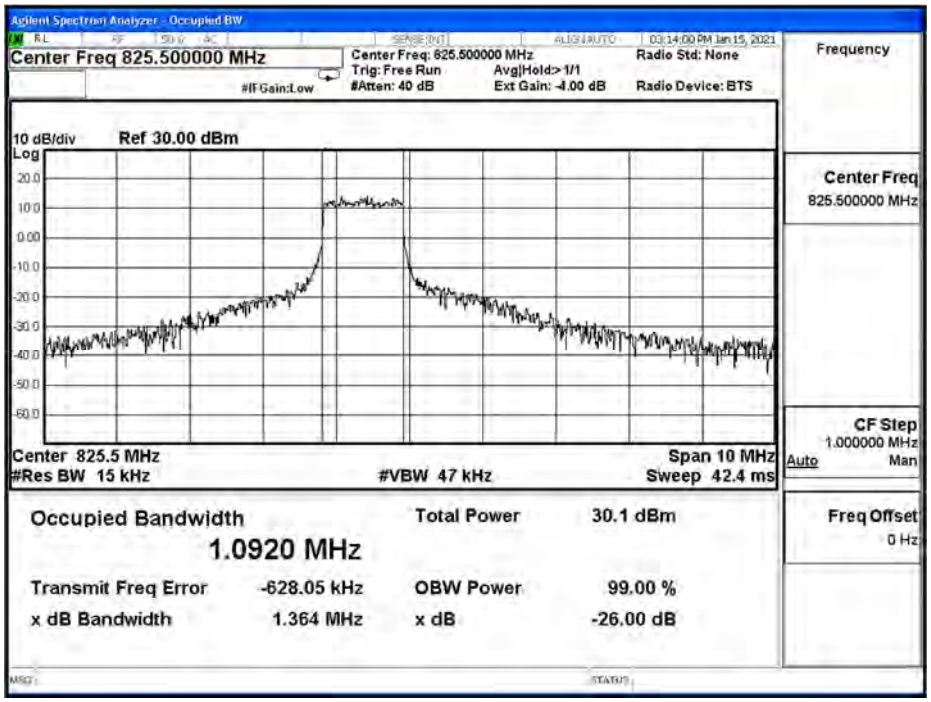
CAT-M1_B5_CH20643_1.4M__QPSK_6RB0



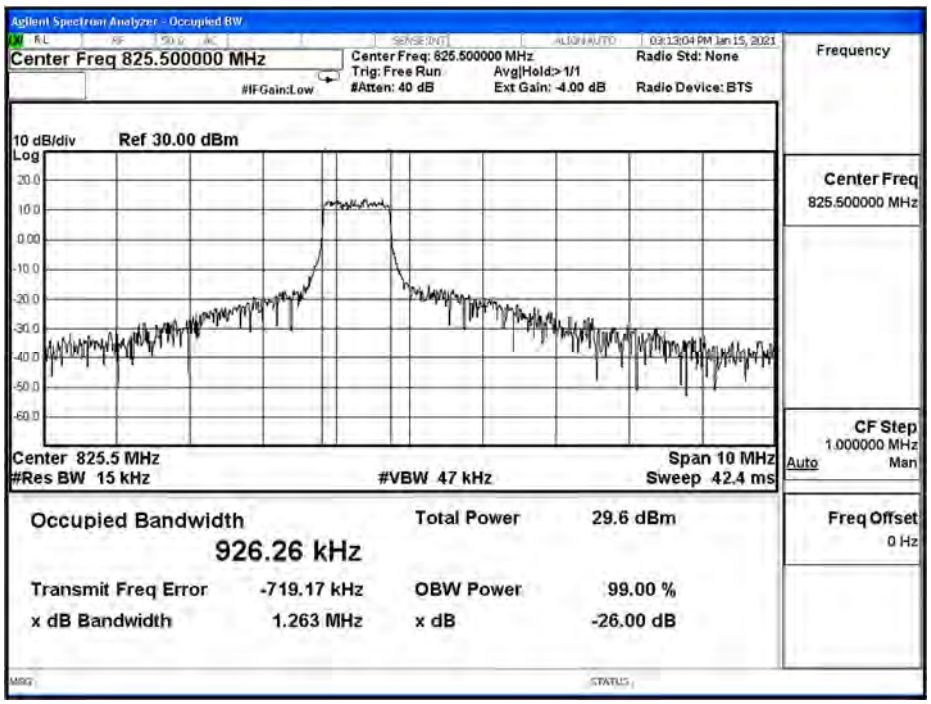
CAT-M1_B5_CH20643_1.4M_16-QAM_5RB1



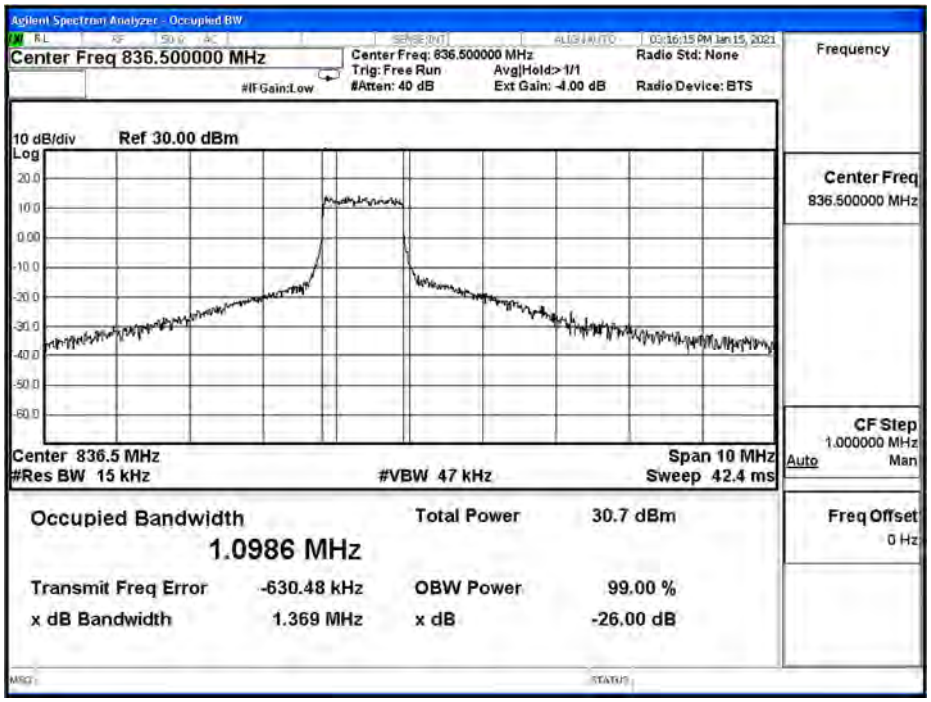
CAT-M1_B5_CH20415_3M__QPSK_6RB0



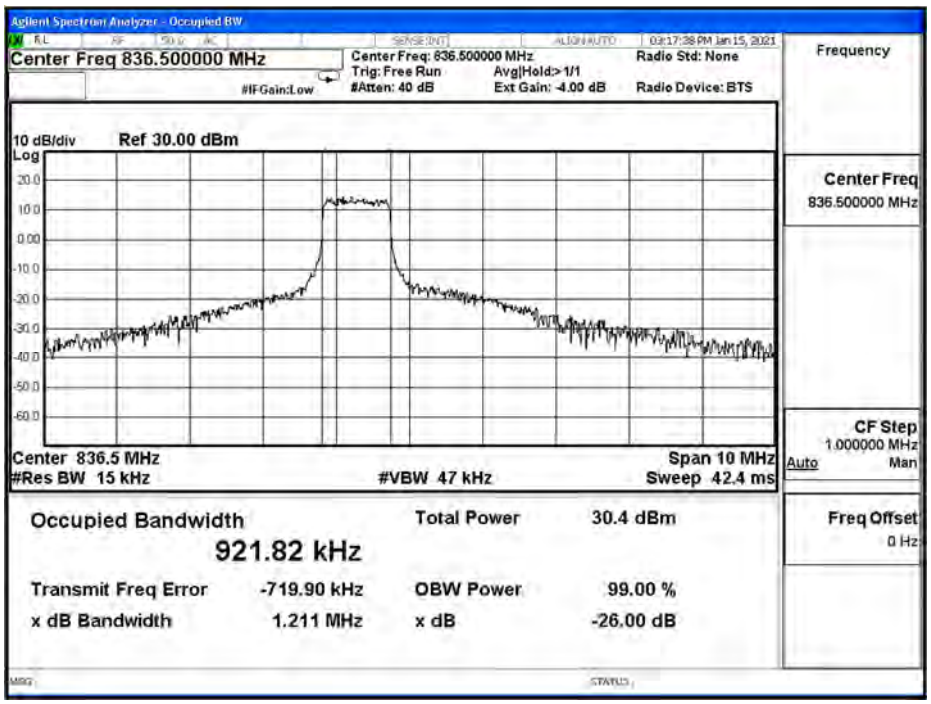
CAT-M1_B5_CH20415_3M_16-QAM_5RB0



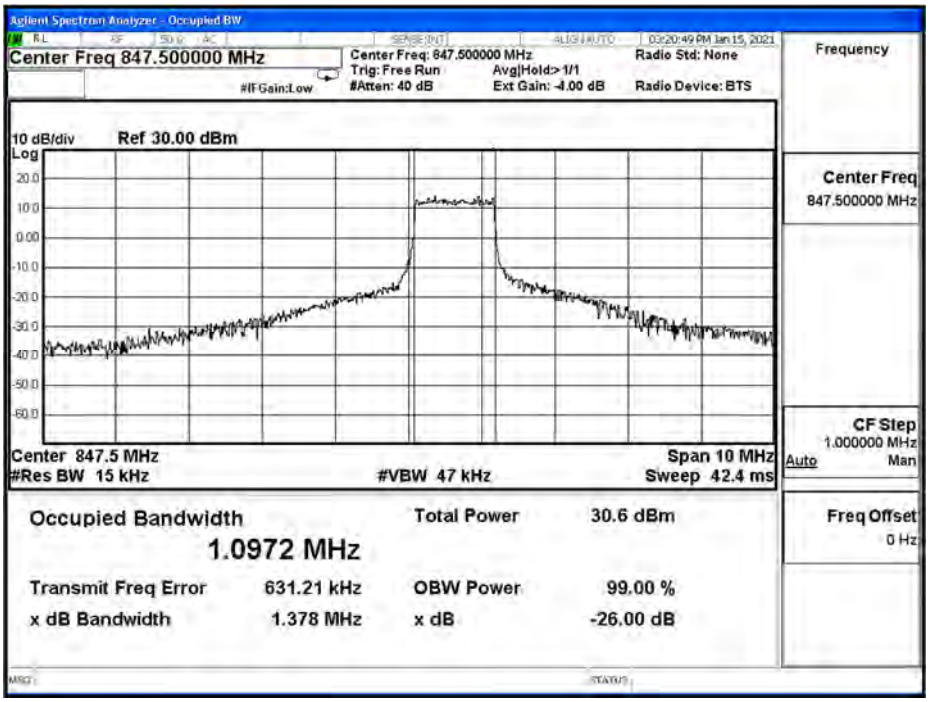
CAT-M1_B5_CH20525_3M__QPSK_6RB0



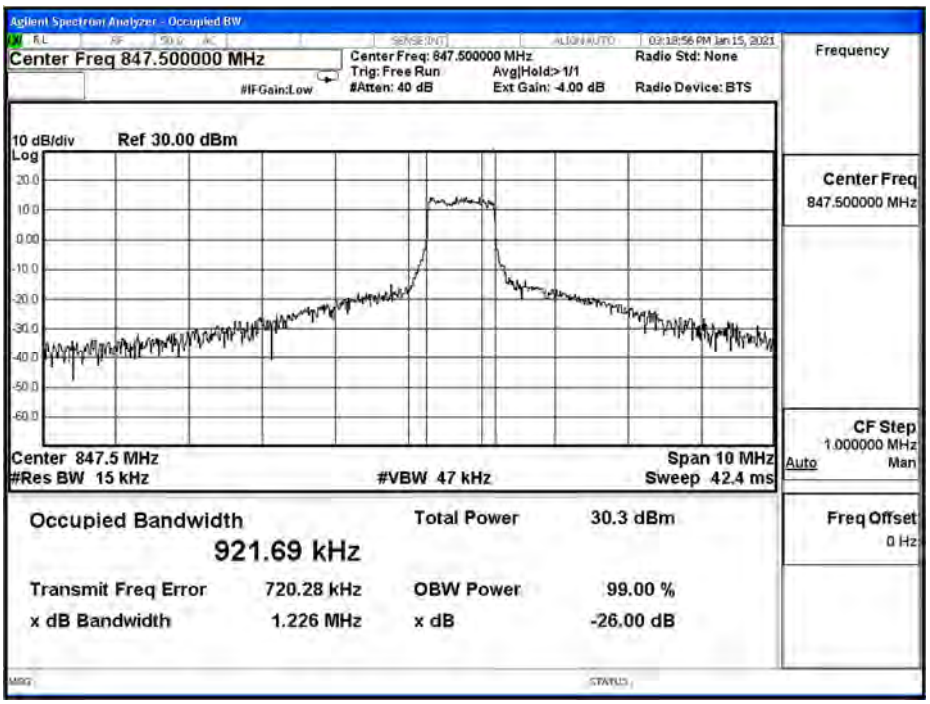
CAT-M1_B5_CH20525_3M_16-QAM_5RB0



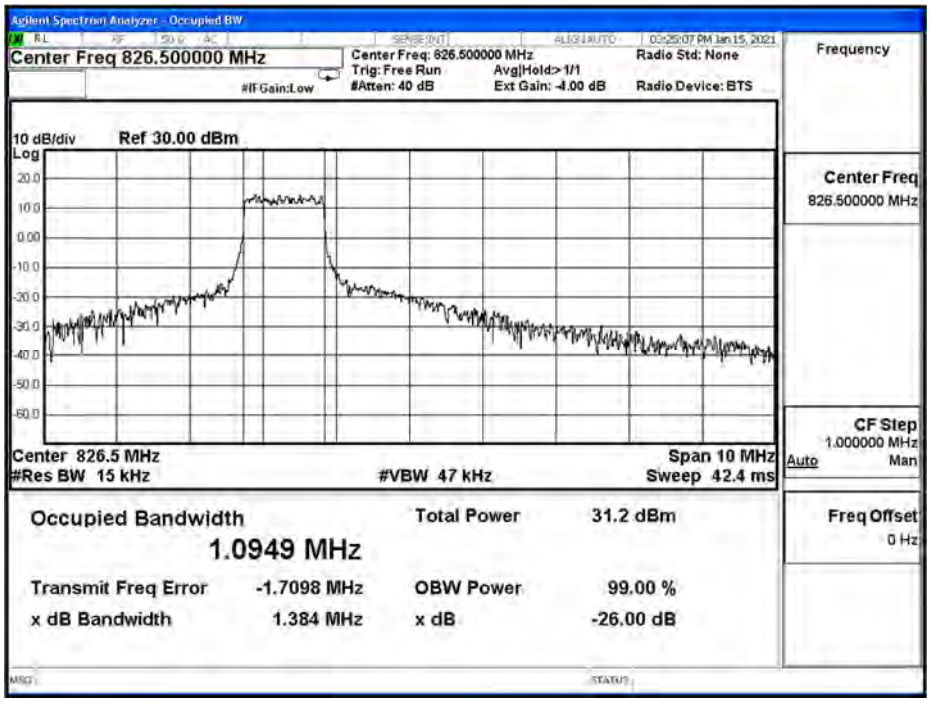
CAT-M1_B5_CH20635_3M__QPSK_6RB0



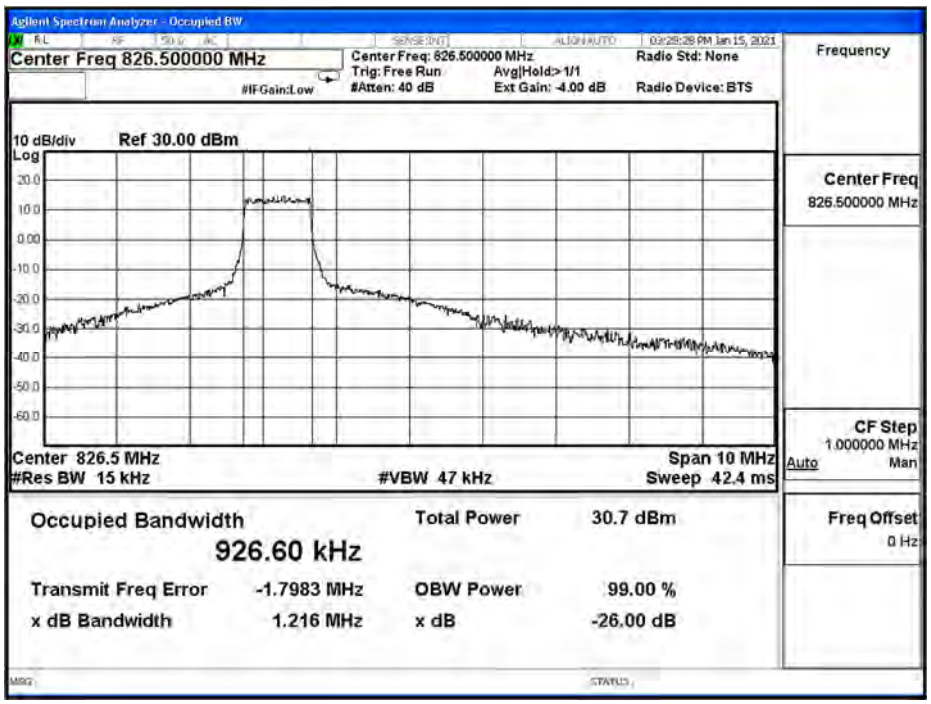
CAT-M1_B5_CH20635_3M_16-QAM_5RB1



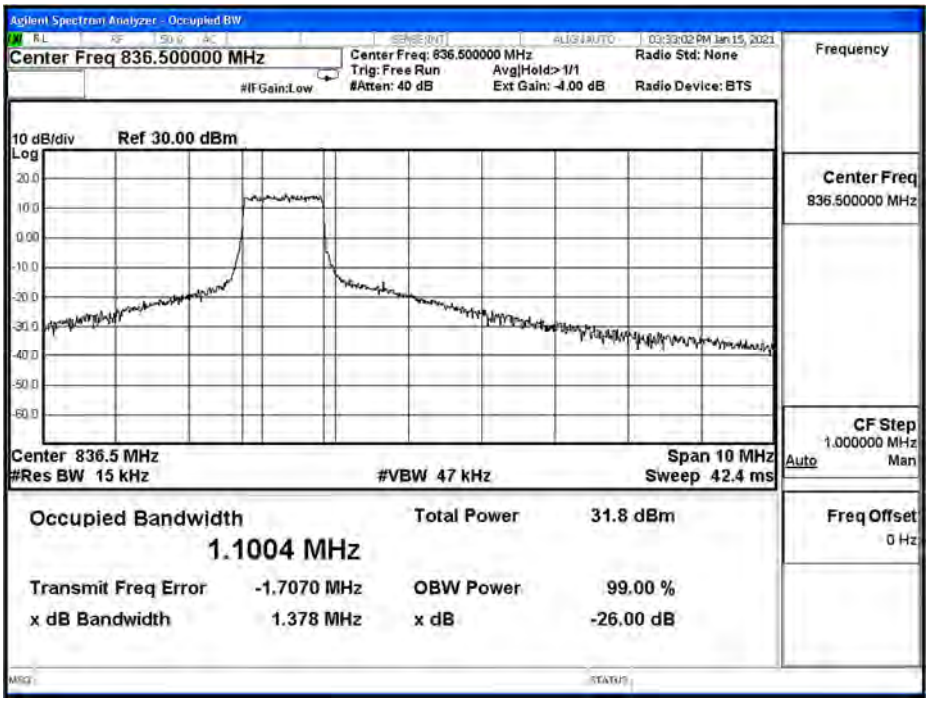
CAT-M1_B5_CH20425_5M__QPSK_6RB0



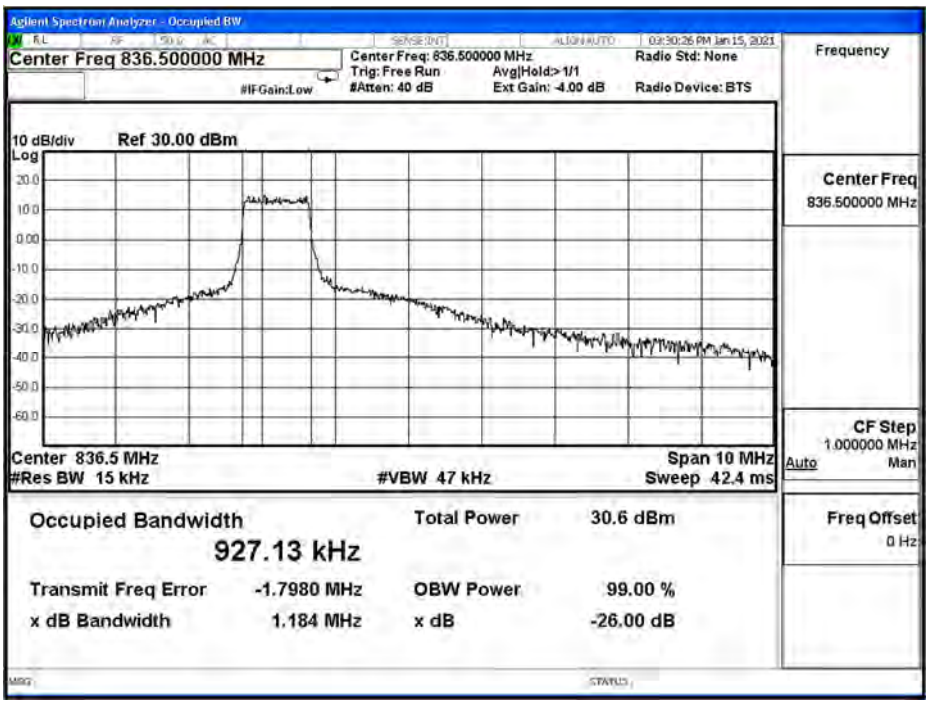
CAT-M1_B5_CH20425_5M_16-QAM_5RB0



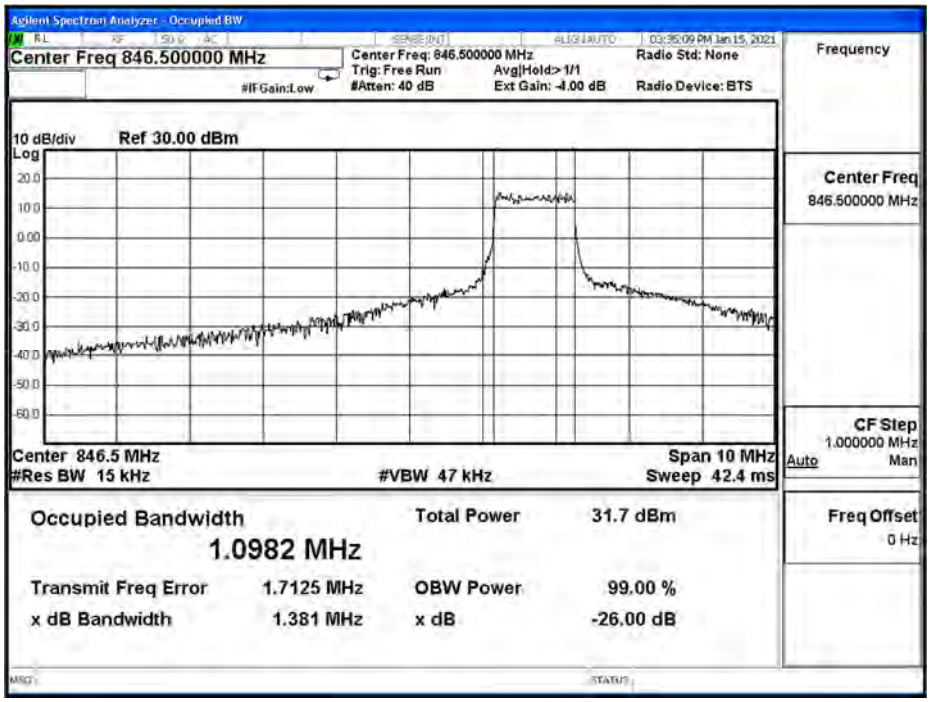
CAT-M1_B5_CH20525_5M__QPSK_6RB0



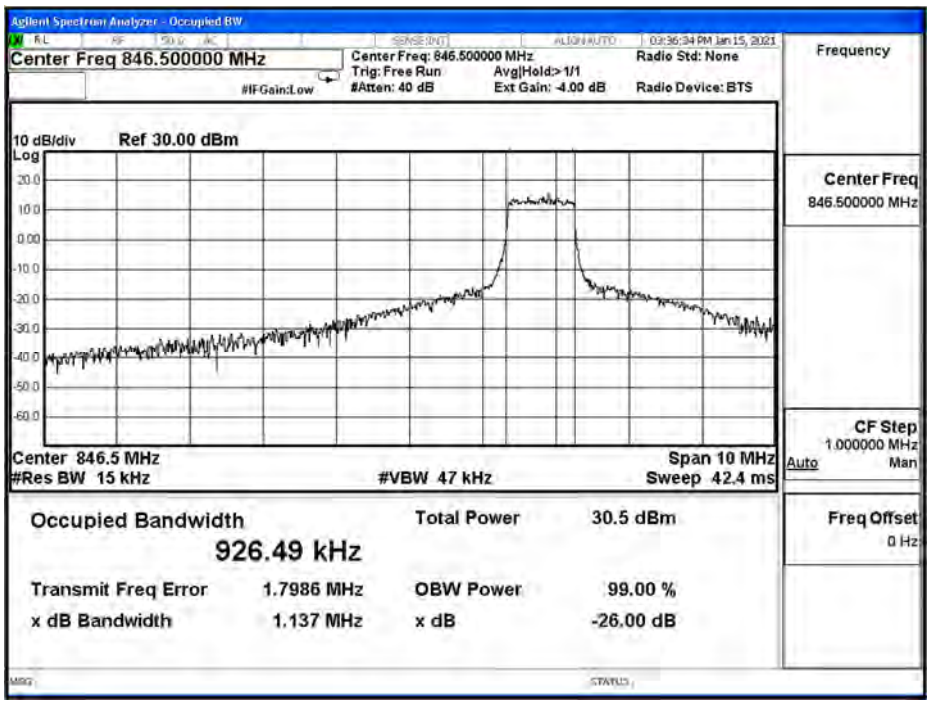
CAT-M1_B5_CH20525_5M_16-QAM_5RB0



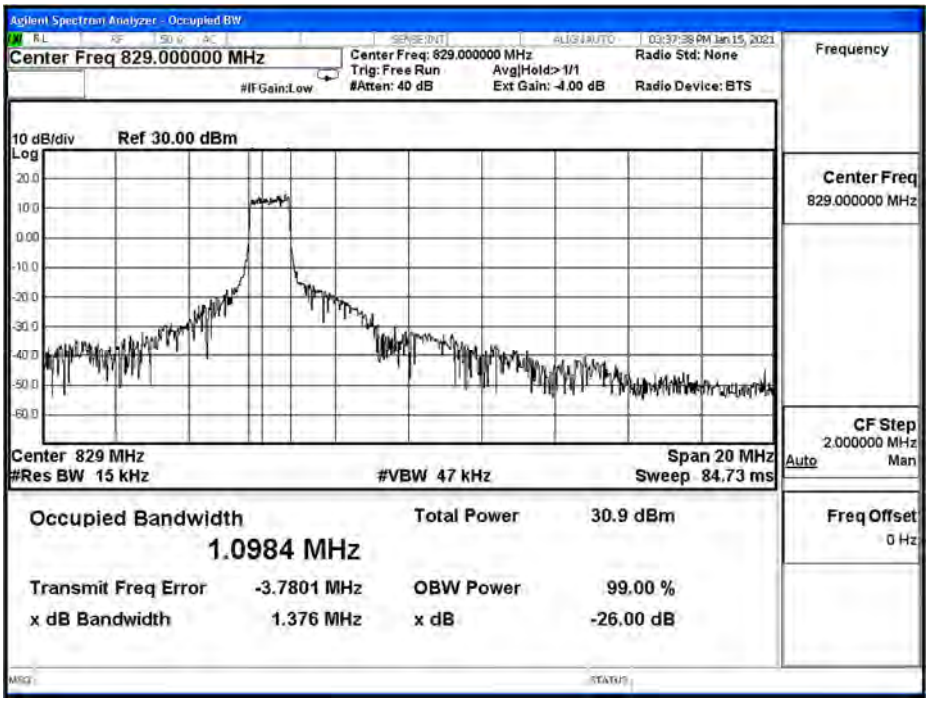
CAT-M1_B5_CH20625_5M__QPSK_6RB0



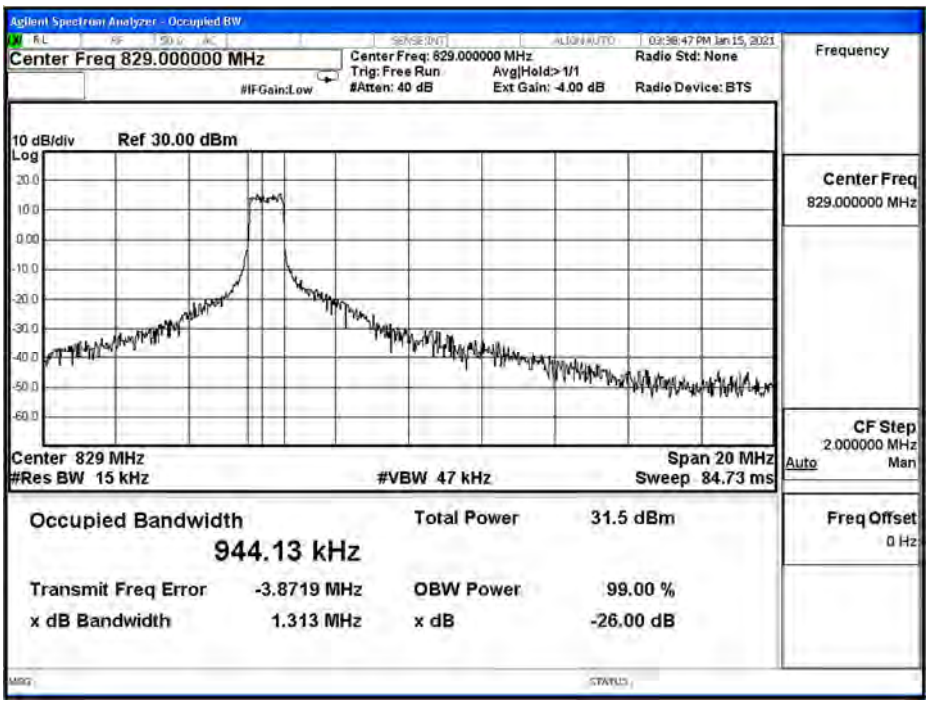
CAT-M1_B5_CH20625_5M_16-QAM_5RB1



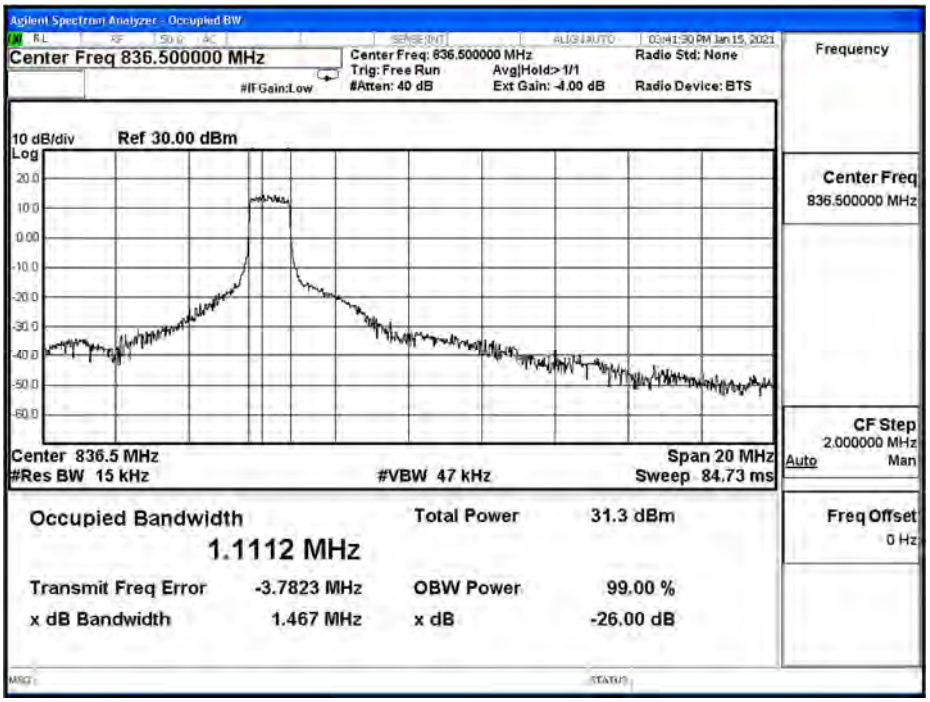
CAT-M1_B5_CH20450_10M__QPSK_6RB0



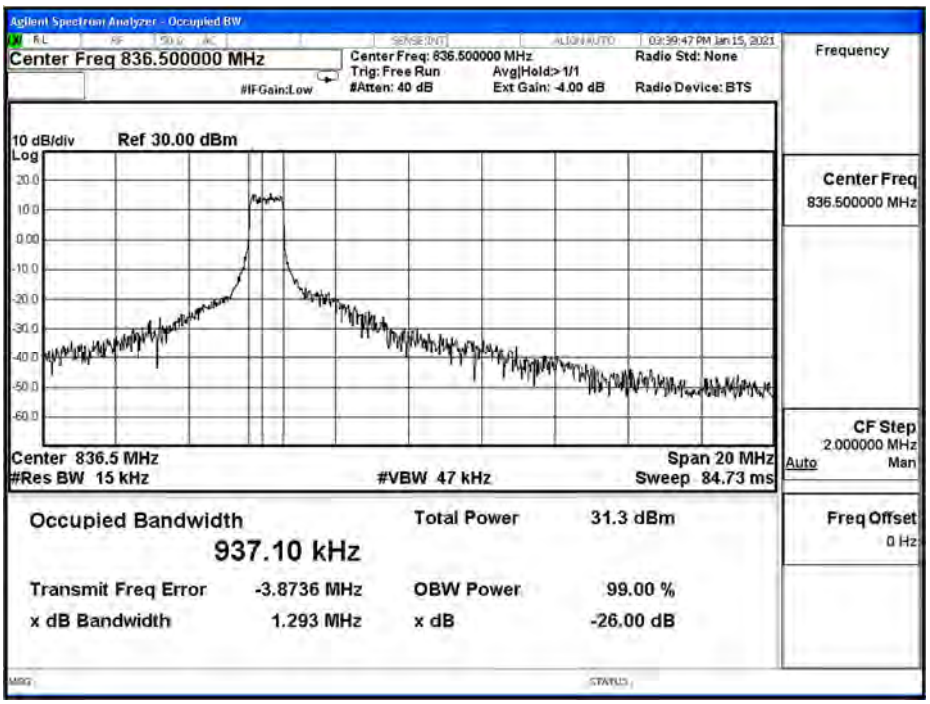
CAT-M1_B5_CH20450_10M_16-QAM_5RB0



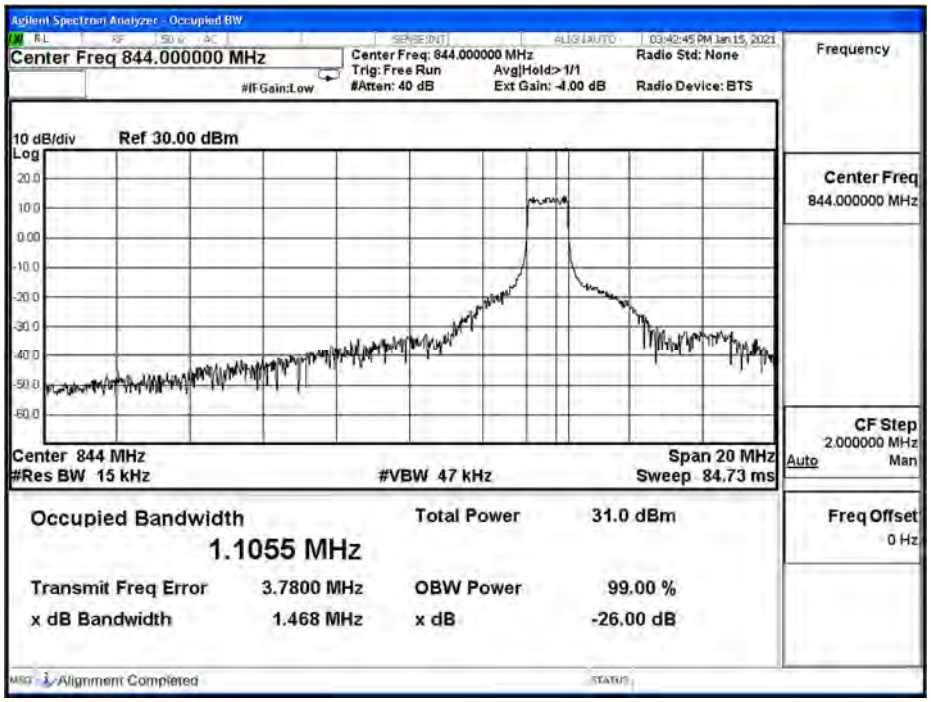
CAT-M1_B5_CH20525_10M__QPSK_6RB0



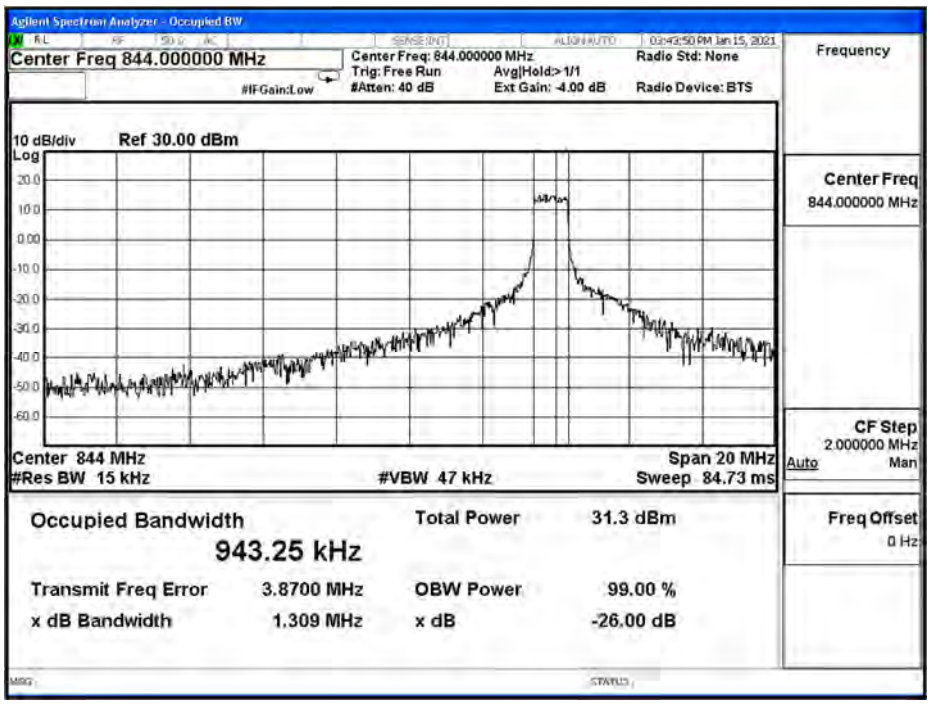
CAT-M1_B5_CH20525_10M_16-QAM_5RB0



CAT-M1_B5_CH20600_10M__QPSK_6RB0



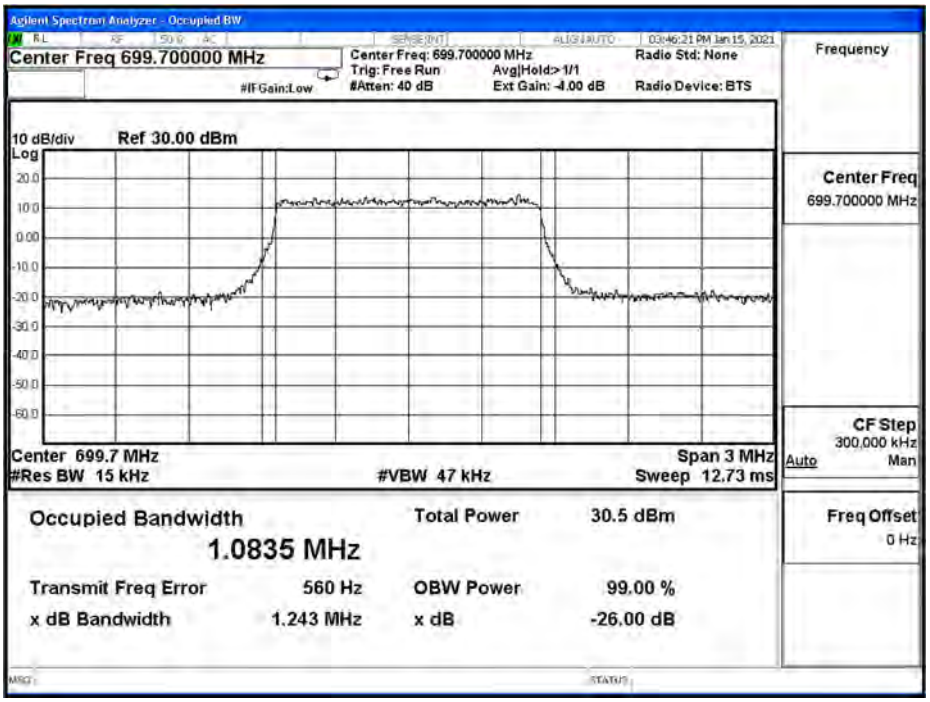
CAT-M1_B5_CH20600_10M_16-QAM_5RB1



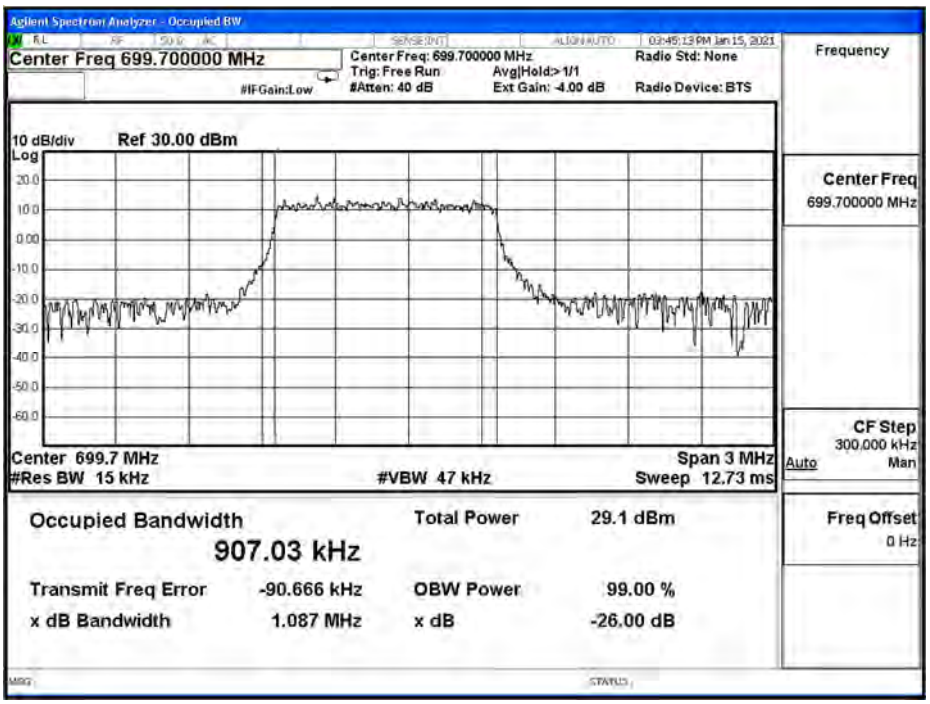
Product	Connectivity Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 4: Band12 Link		
Date of Test	2021/01/15	Test Site	SR12-H
Temperature (°C)	24	Humidity (%RH)	60

Bandwidth (MHz)	Modulation	Frequency (MHz)	Measure Level (MHz)		Limit (MHz)
			26dB BW	99% BW	
1.4M	QPSK	699.7	1.243	1.083	N/A
		707.5	1.256	1.082	N/A
		715.3	1.252	1.086	N/A
	16-QAM	699.7	1.087	0.907	N/A
		707.5	1.088	0.910	N/A
		715.3	1.091	0.909	N/A
3M	QPSK	700.5	1.390	1.100	N/A
		707.5	1.418	1.100	N/A
		714.5	1.472	1.105	N/A
	16-QAM	700.5	1.216	0.926	N/A
		707.5	1.203	0.924	N/A
		714.5	1.205	0.925	N/A
5M	QPSK	710.5	1.369	1.101	N/A
		707.5	1.344	1.096	N/A
		713.5	1.326	1.096	N/A
	16-QAM	710.5	1.186	0.933	N/A
		707.5	1.165	0.931	N/A
		713.5	1.201	0.927	N/A
10M	QPSK	704.0	1.441	1.104	N/A
		707.5	1.375	1.104	N/A
		711.0	1.420	1.108	N/A
	16-QAM	704.0	1.289	0.944	N/A
		707.5	1.320	0.946	N/A
		711.0	1.288	0.942	N/A

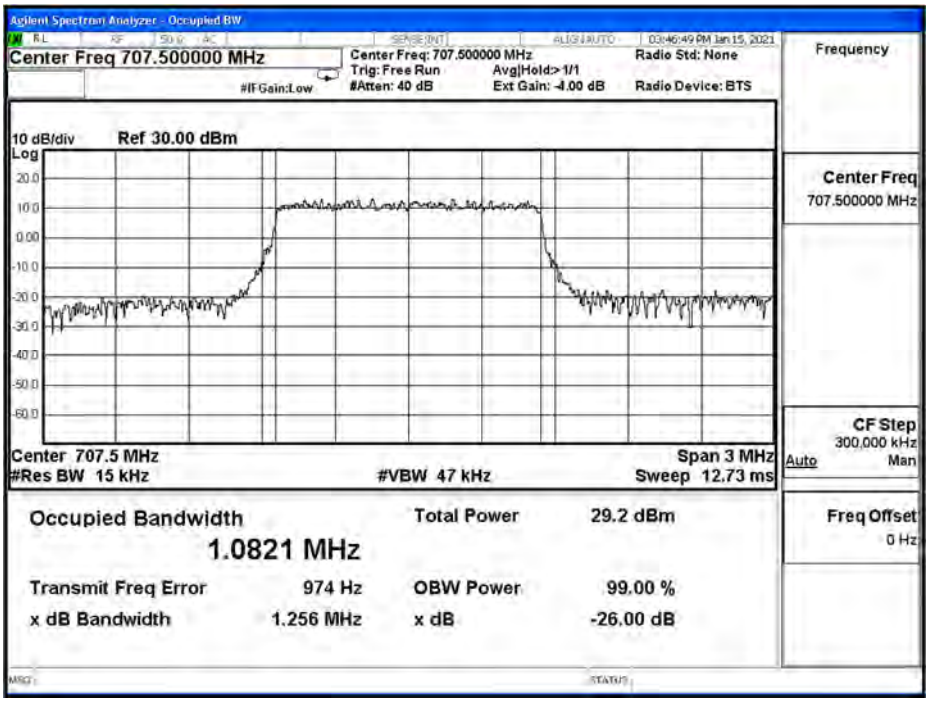
CAT-M1_B12_CH23017_1.4M__QPSK_6RB0



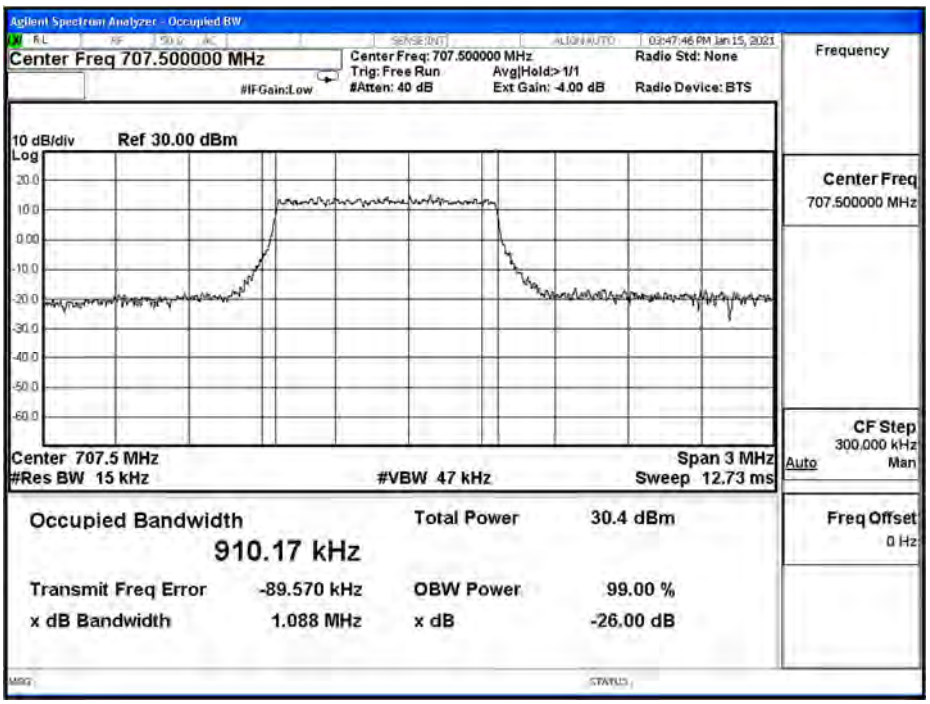
CAT-M1_B12_CH23017_1.4M_16-QAM_5RB0



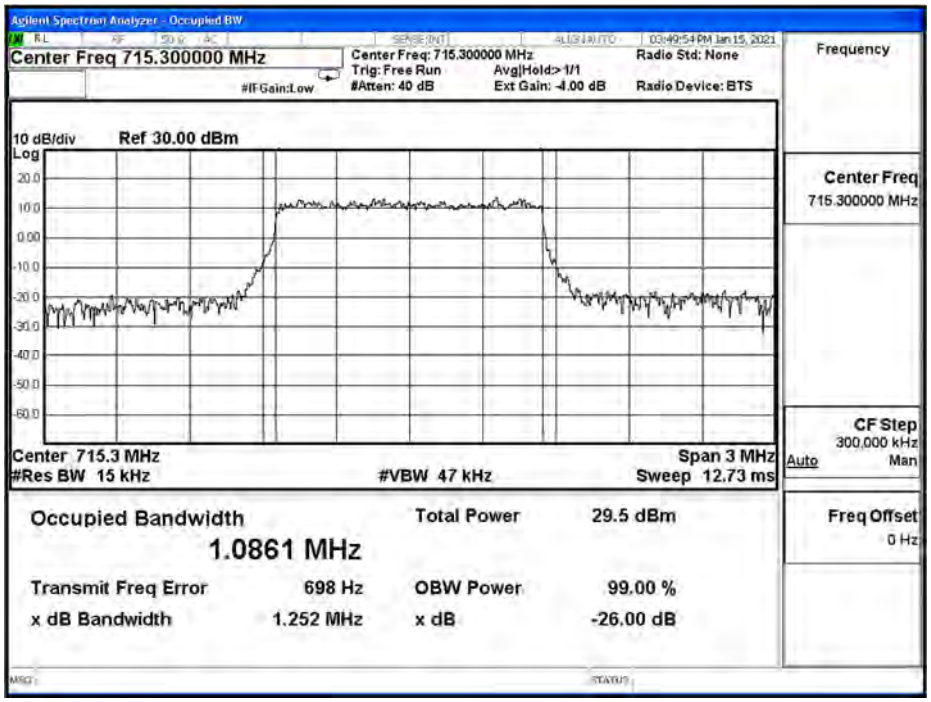
CAT-M1_B12_CH23095_1.4M__QPSK_6RB0



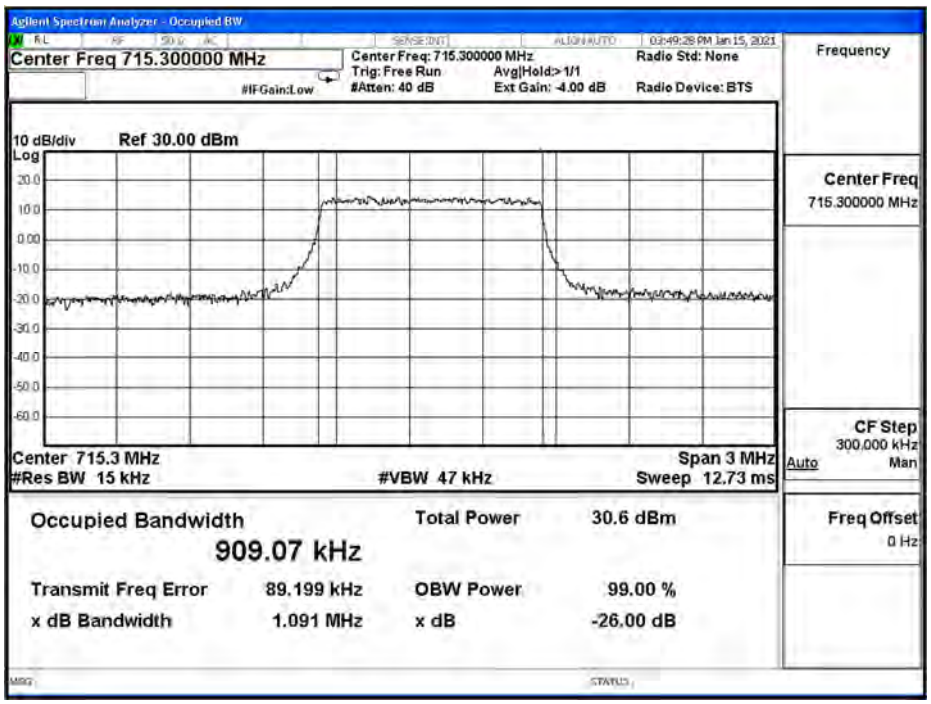
CAT-M1_B12_CH23095_1.4M_16-QAM_5RB0



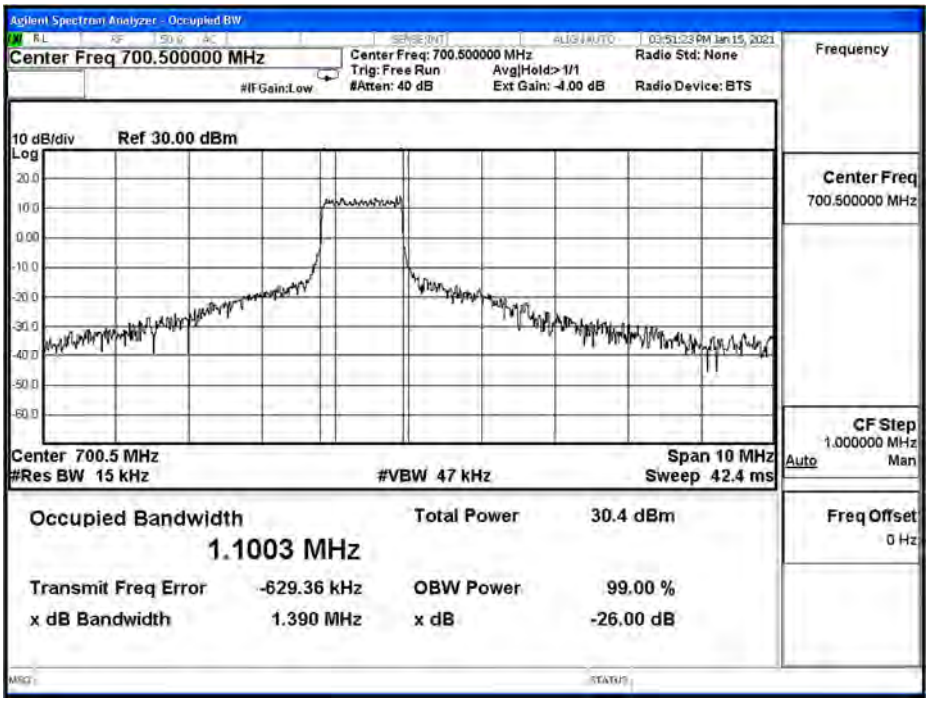
CAT-M1_B12_CH23173_1.4M__QPSK_6RB0



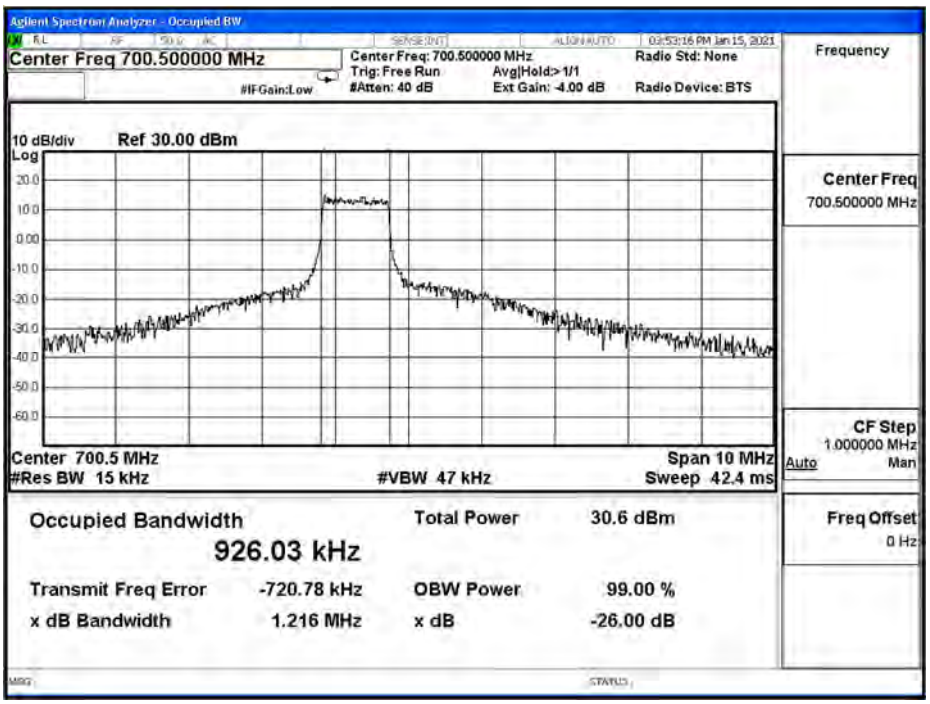
CAT-M1_B12_CH23173_1.4M_16-QAM_5RB1



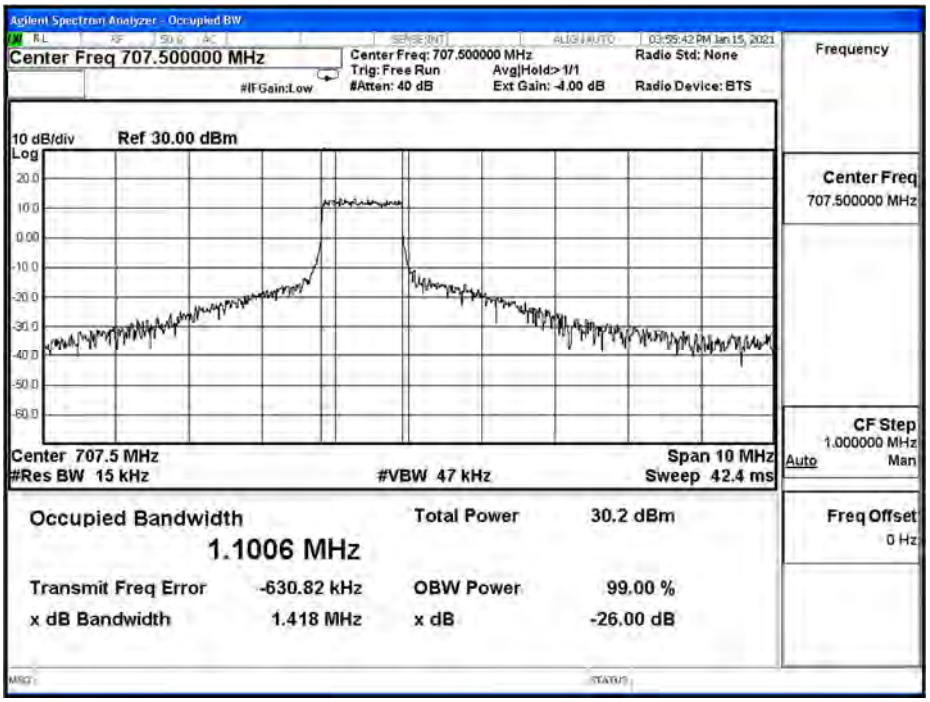
CAT-M1_B12_CH23025_3M__QPSK_6RB0



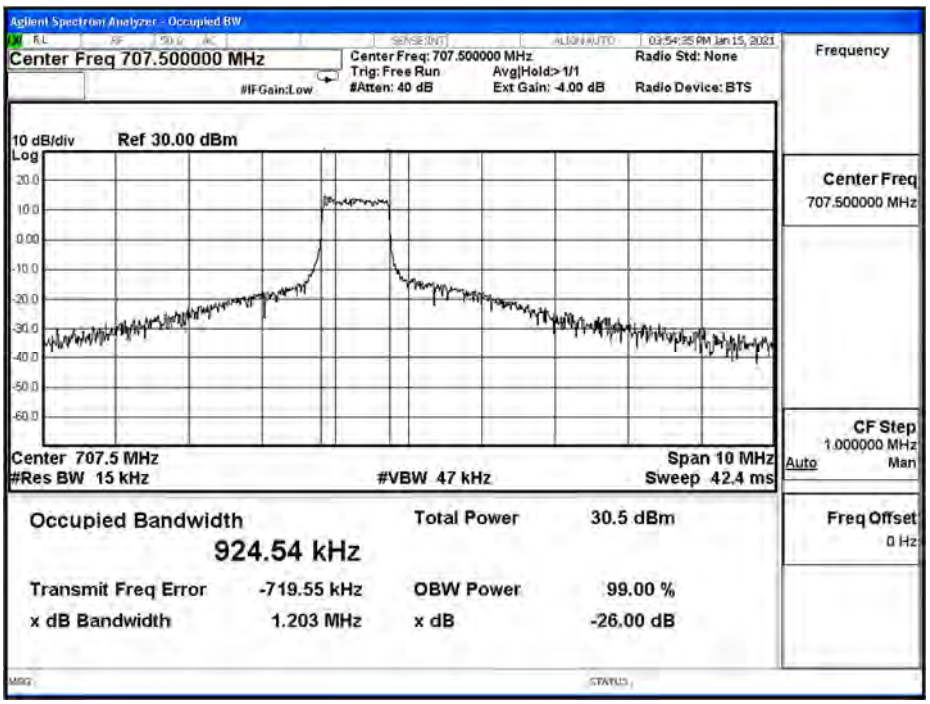
CAT-M1_B12_CH23025_3M_16-QAM_5RB0



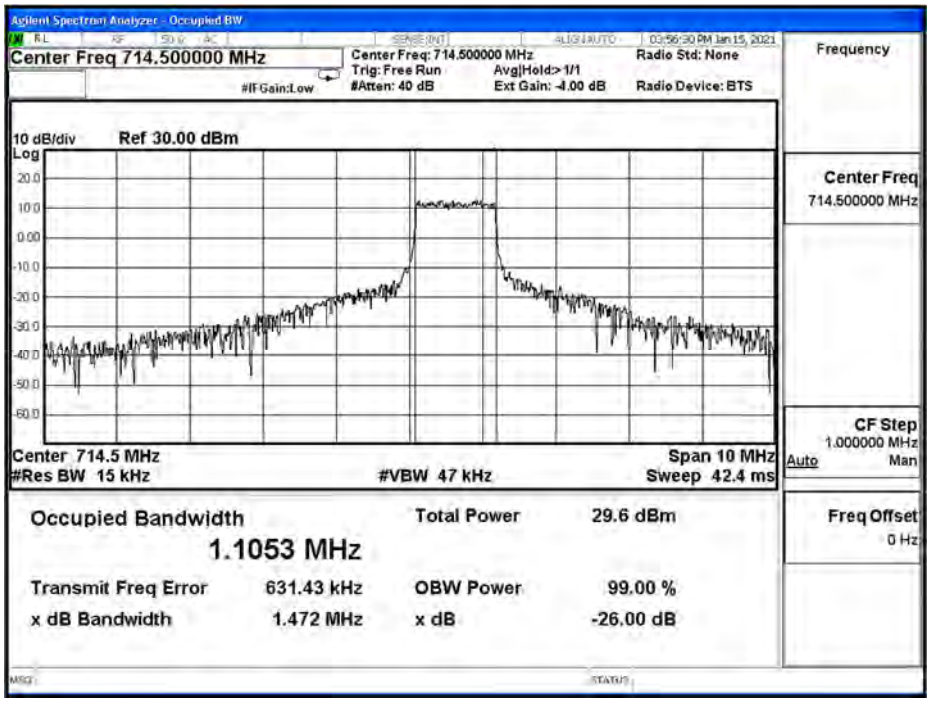
CAT-M1_B12_CH23095_3M__QPSK_6RB0



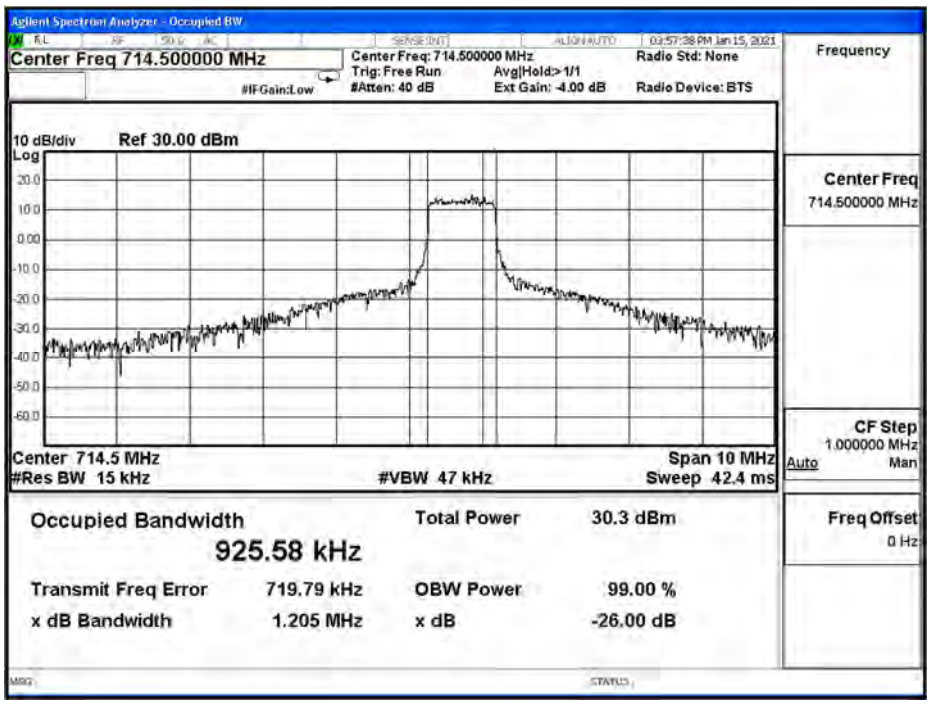
CAT-M1_B12_CH23095_3M_16-QAM_5RB0



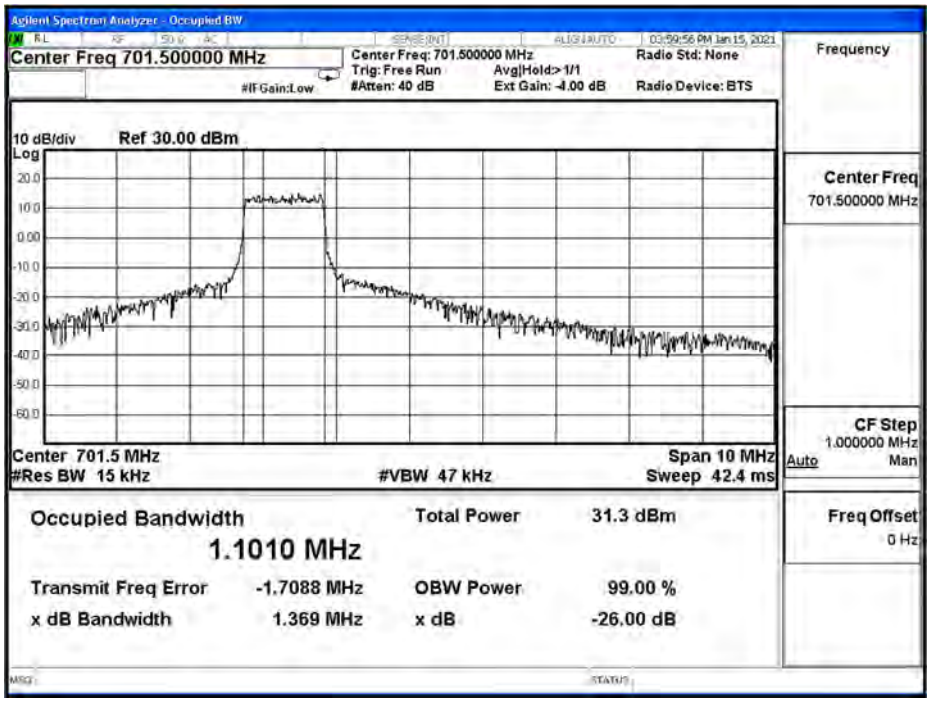
CAT-M1_B12_CH23165_3M__QPSK_6RB0



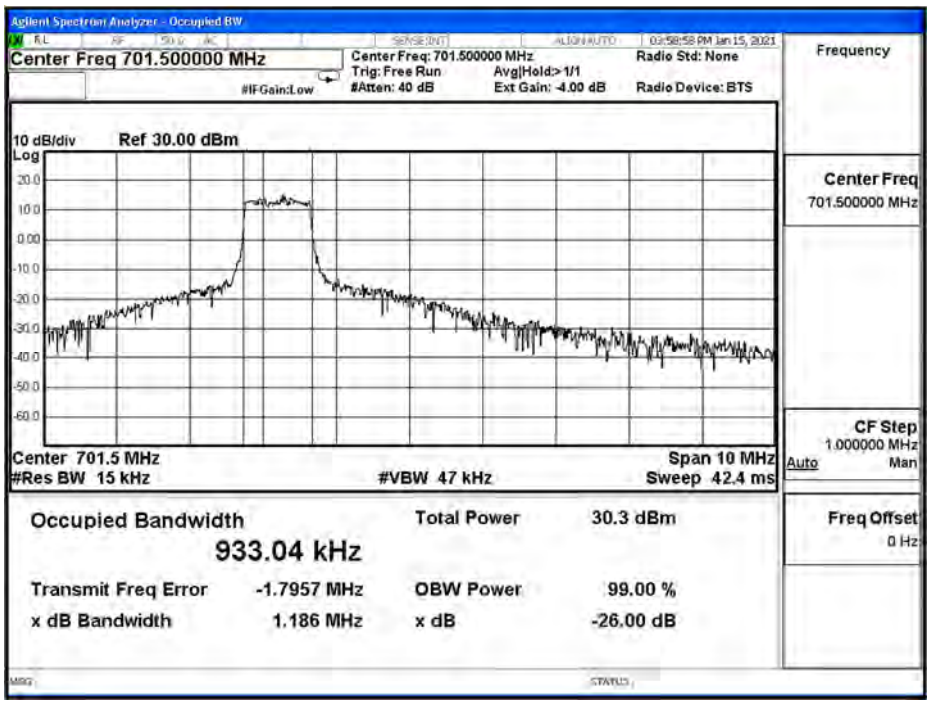
CAT-M1_B12_CH23165_3M_16-QAM_5RB1



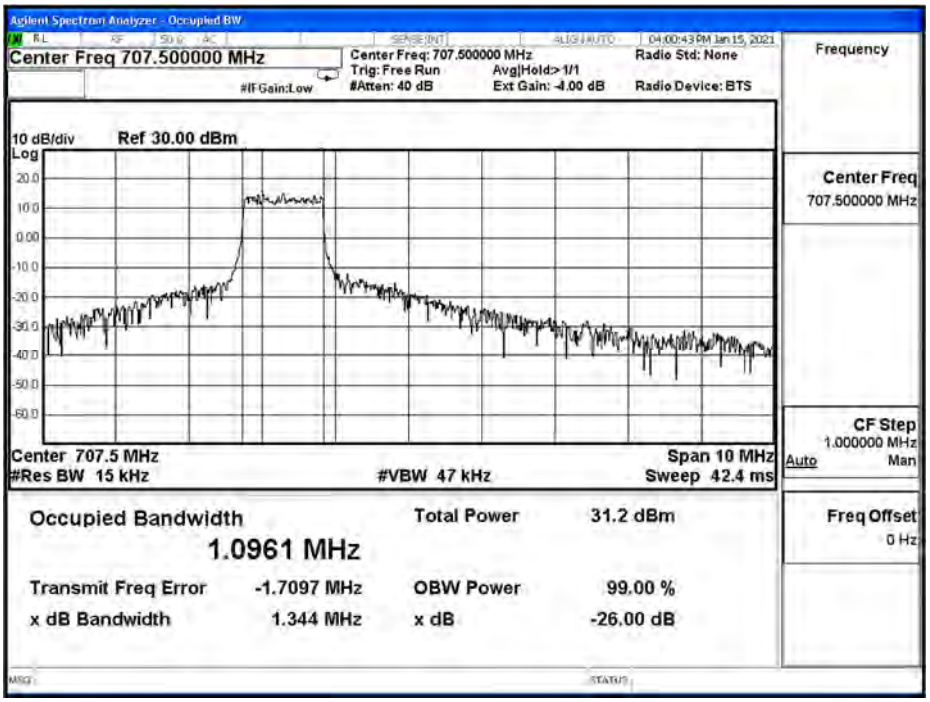
CAT-M1_B12_CH23035_5M__QPSK_6RB0



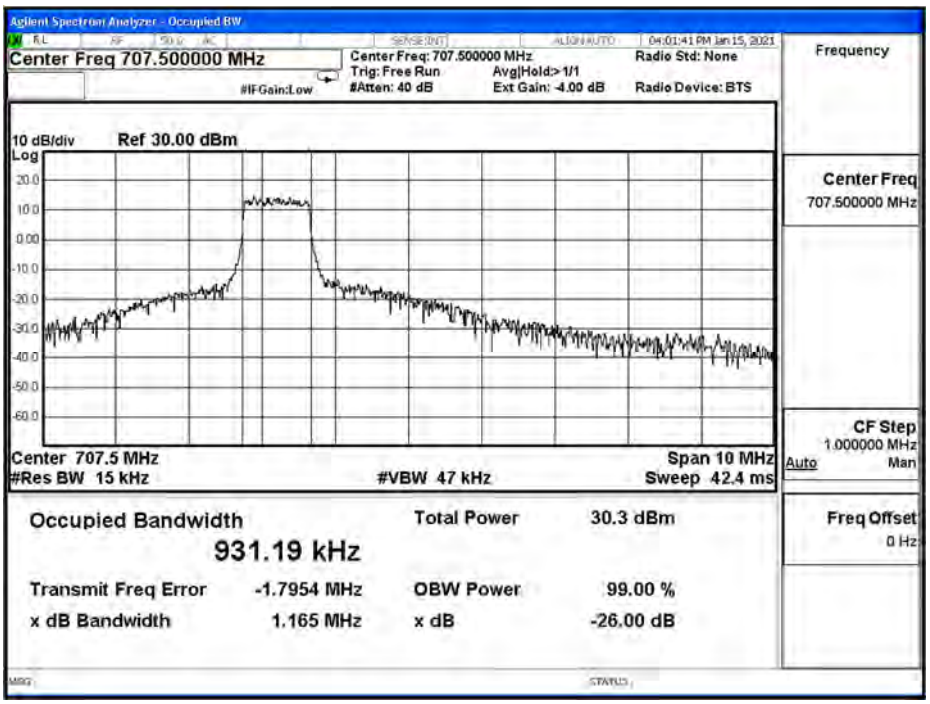
CAT-M1_B12_CH23035_5M_16-QAM_5RB0



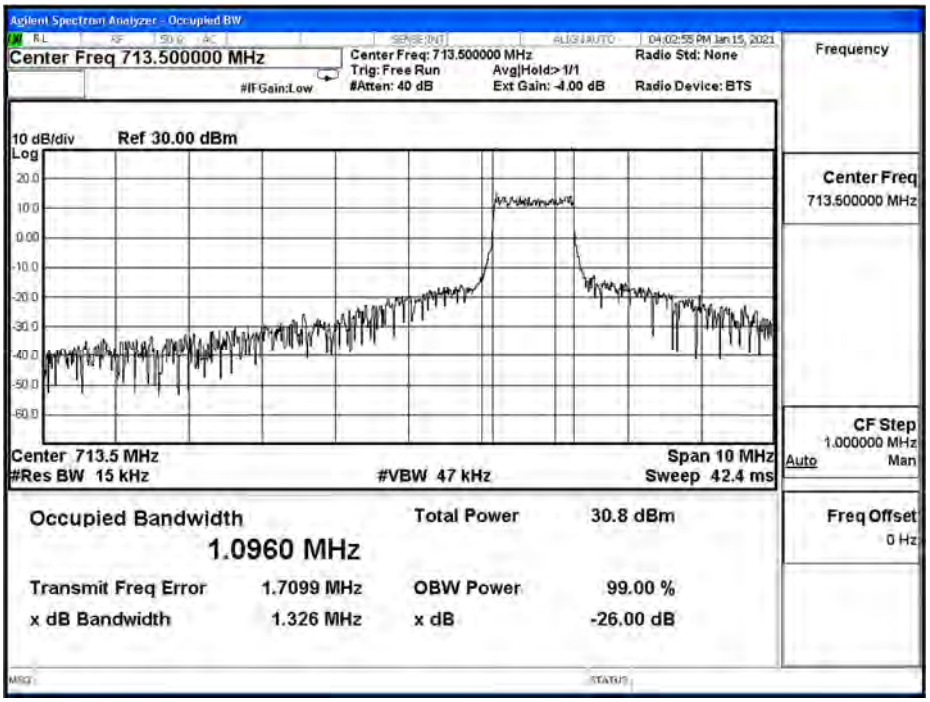
CAT-M1_B12_CH23095_5M__QPSK_6RB0



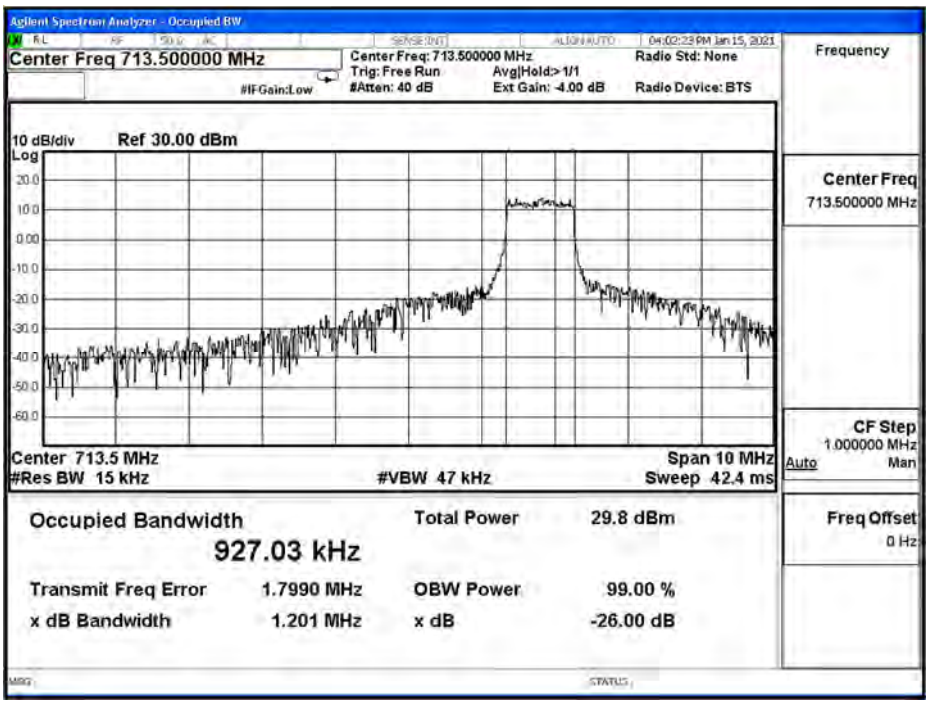
CAT-M1_B12_CH23095_5M_16-QAM_5RB0



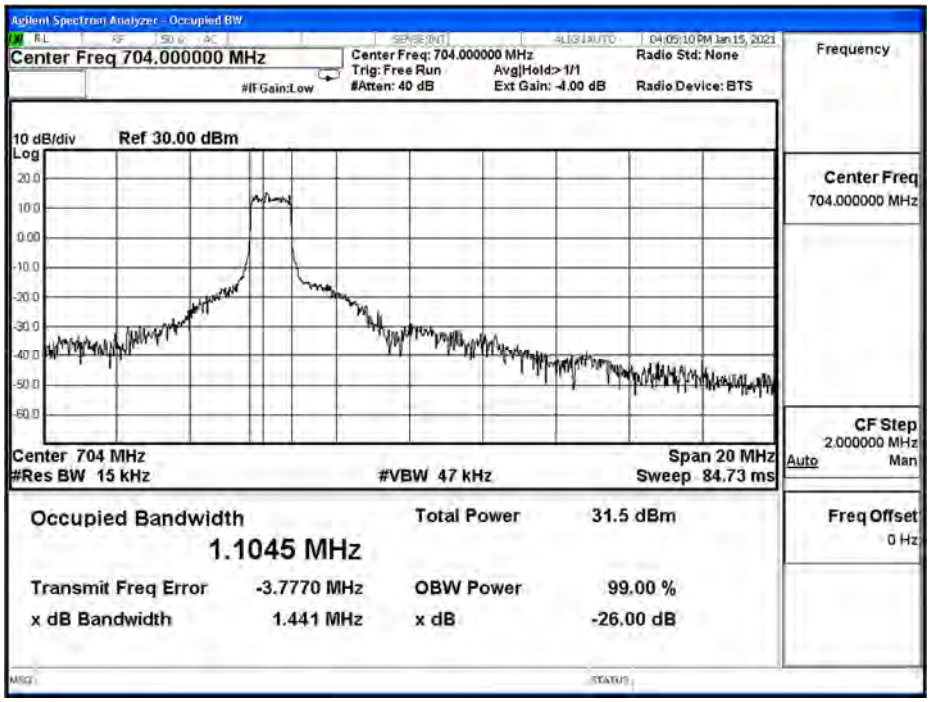
CAT-M1_B12_CH23155_5M__QPSK_6RB0



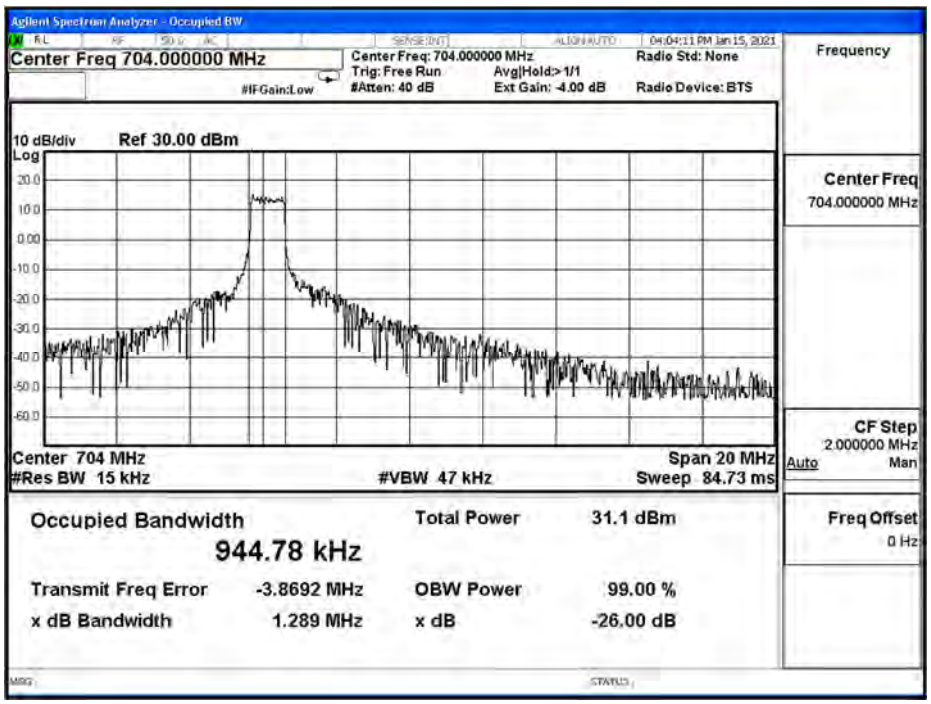
CAT-M1_B12_CH23155_5M_16-QAM_5RB1



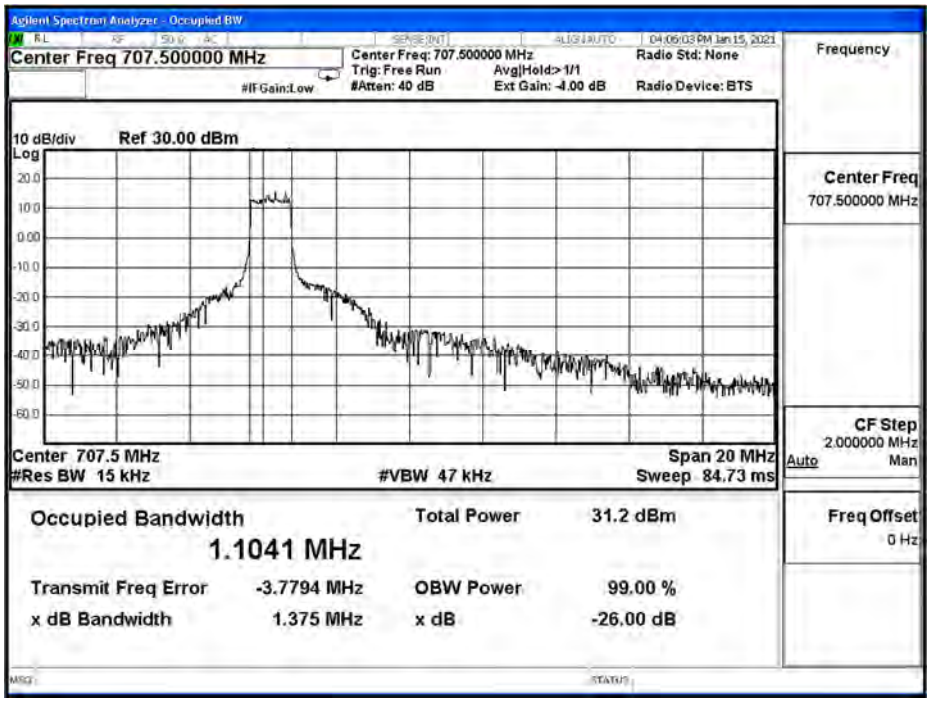
CAT-M1_B12_CH23060_10M__QPSK_6RB0



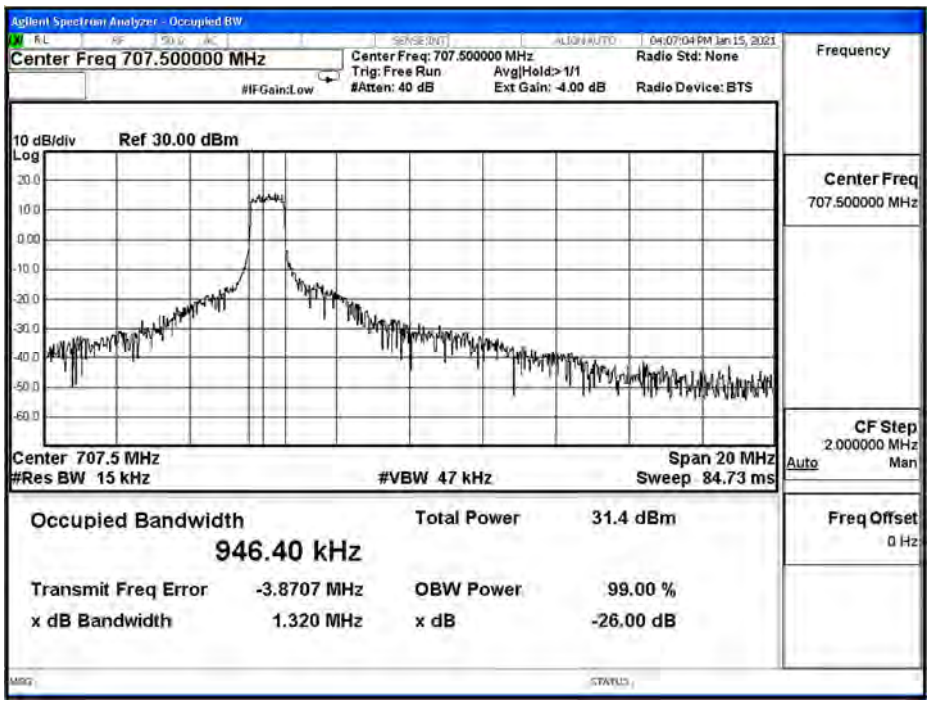
CAT-M1_B12_CH23060_10M_16-QAM_5RB0



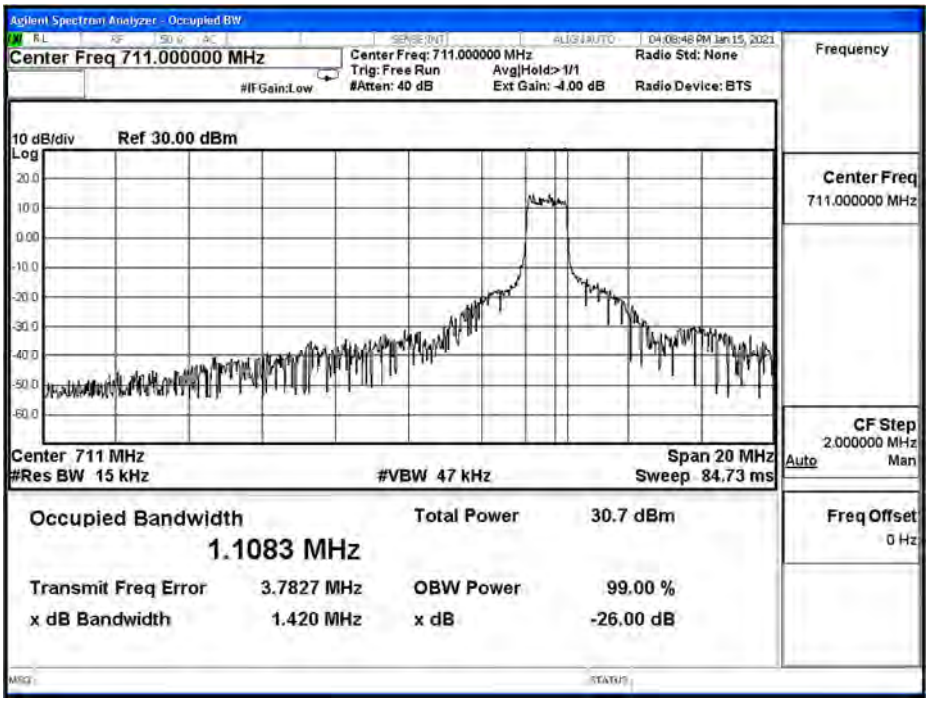
CAT-M1_B12_CH23095_10M__QPSK_6RB0



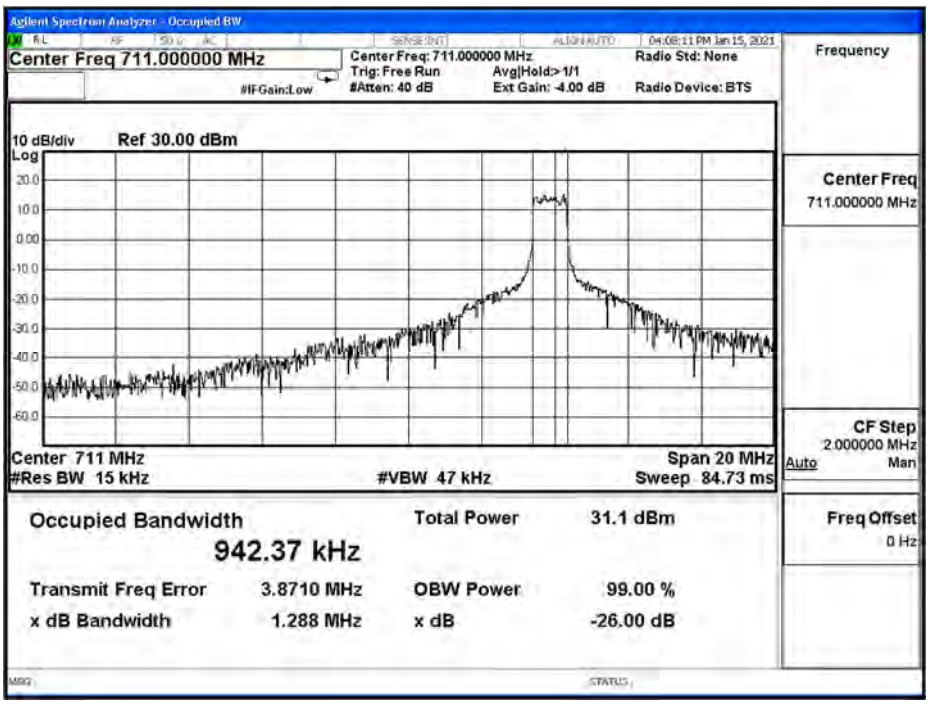
CAT-M1_B12_CH23095_10M_16-QAM_5RB0



CAT-M1_B12_CH23130_10M__QPSK_6RB0



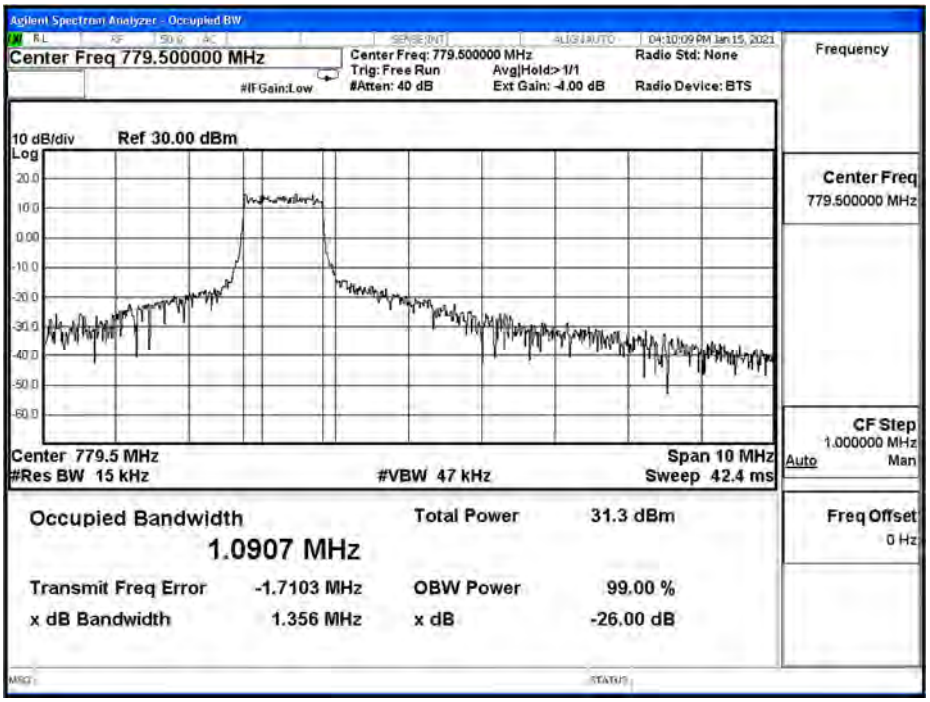
CAT-M1_B12_CH23130_10M_16-QAM_5RB1



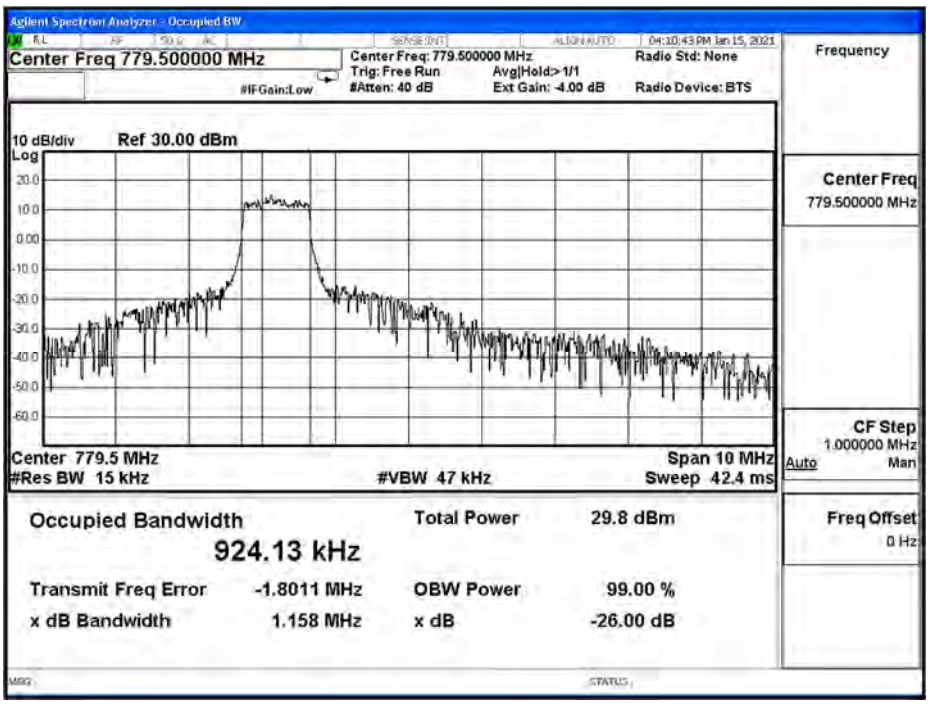
Product	Connectivity Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 5: Band13 Link		
Date of Test	2021/01/15	Test Site	SR12-H
Temperature (°C)	24	Humidity (%RH)	60

Bandwidth (MHz)	Modulation	Frequency (MHz)	Measure Level (MHz)		Limit (MHz)
			26dB BW	99% BW	
5M	QPSK	779.5	1.356	1.090	N/A
		782.0	1.341	1.095	N/A
		784.5	1.366	1.093	N/A
	16-QAM	779.5	1.158	0.924	N/A
		782.0	1.189	0.920	N/A
		784.5	1.171	0.921	N/A
10M	QPSK	782 low	1.474	1.113	N/A
			1.414	1.104	N/A
	16-QAM	782 high	1.322	0.939	N/A
			1.388	0.942	N/A

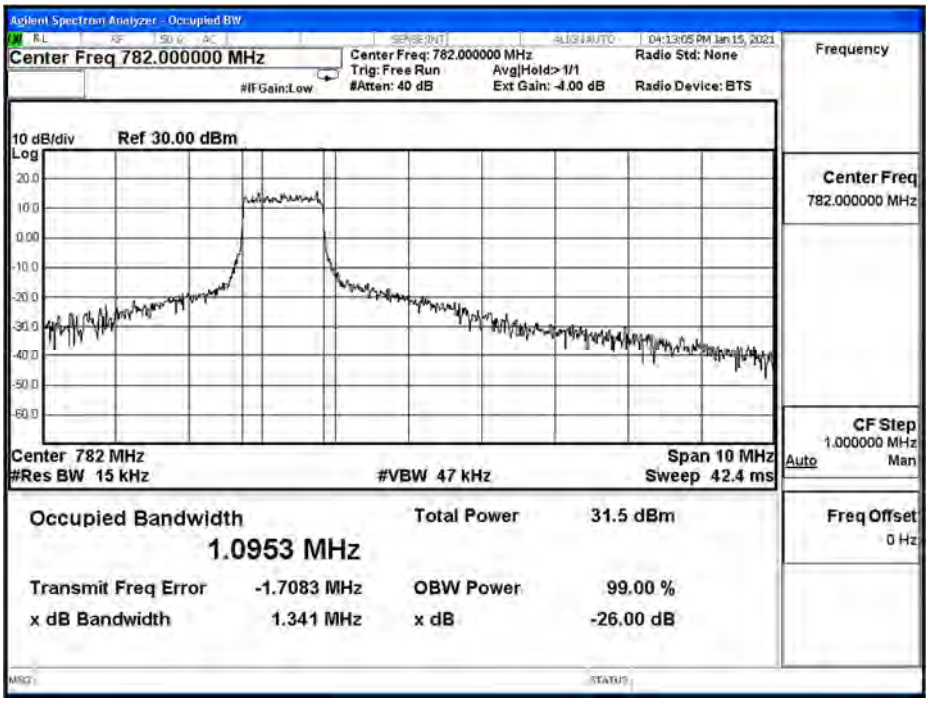
CAT-M1_B13_CH23205_5M__QPSK_6RB0



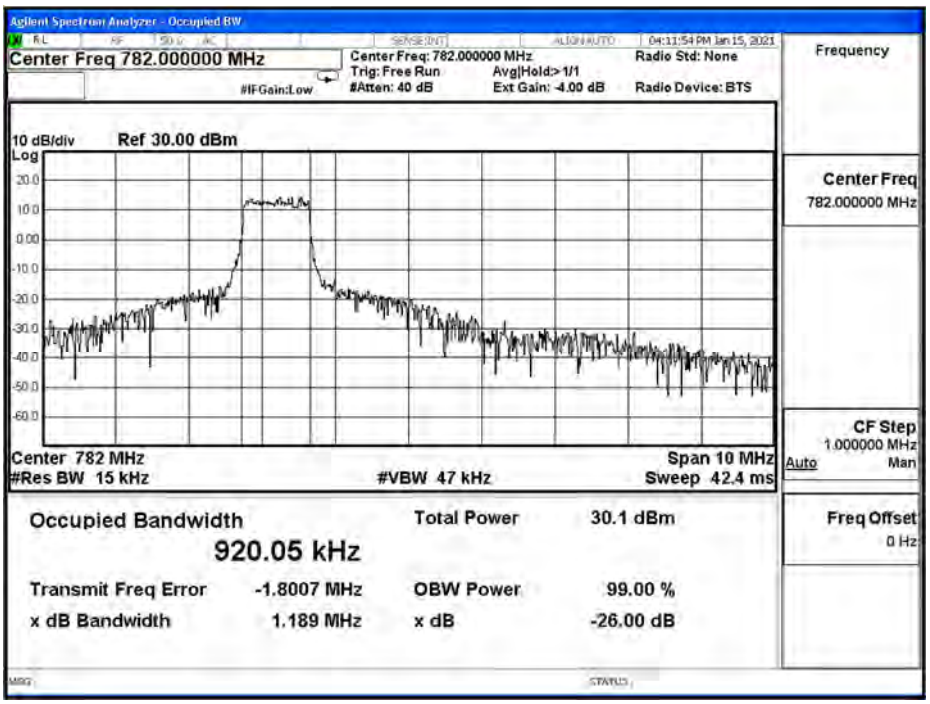
CAT-M1_B13_CH23205_5M_16-QAM_5RB0



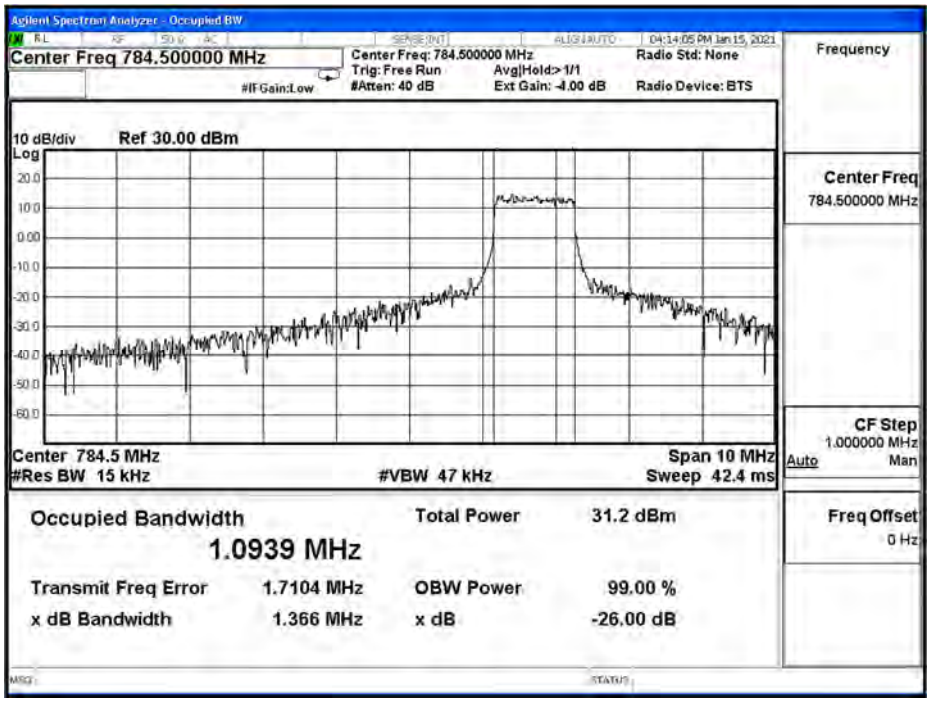
CAT-M1_B13_CH23230_5M__QPSK_6RB0



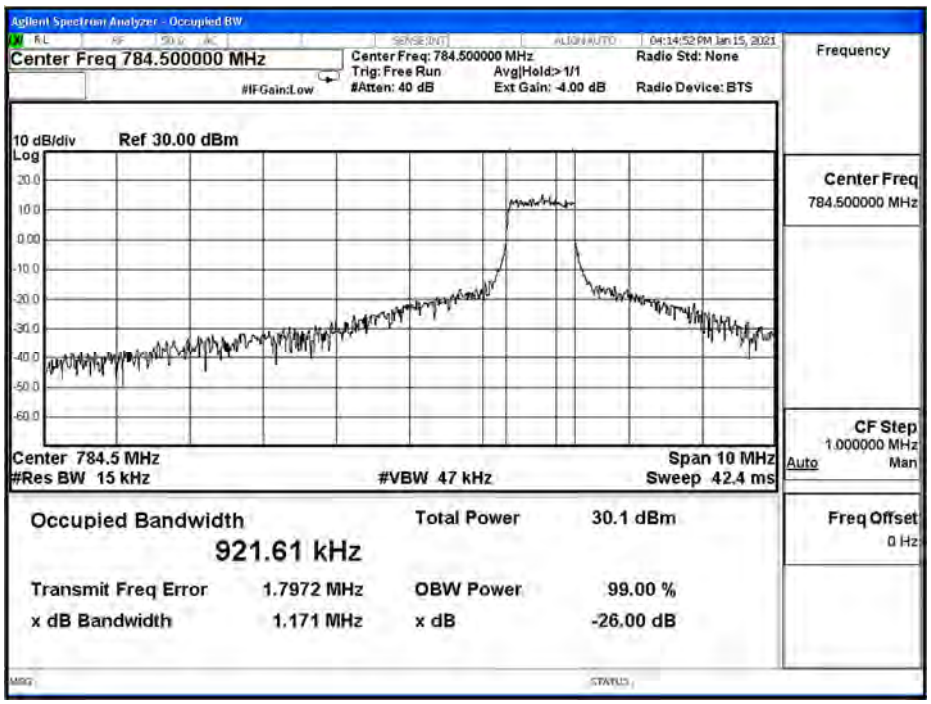
CAT-M1_B13_CH23230_5M_16-QAM_5RB0



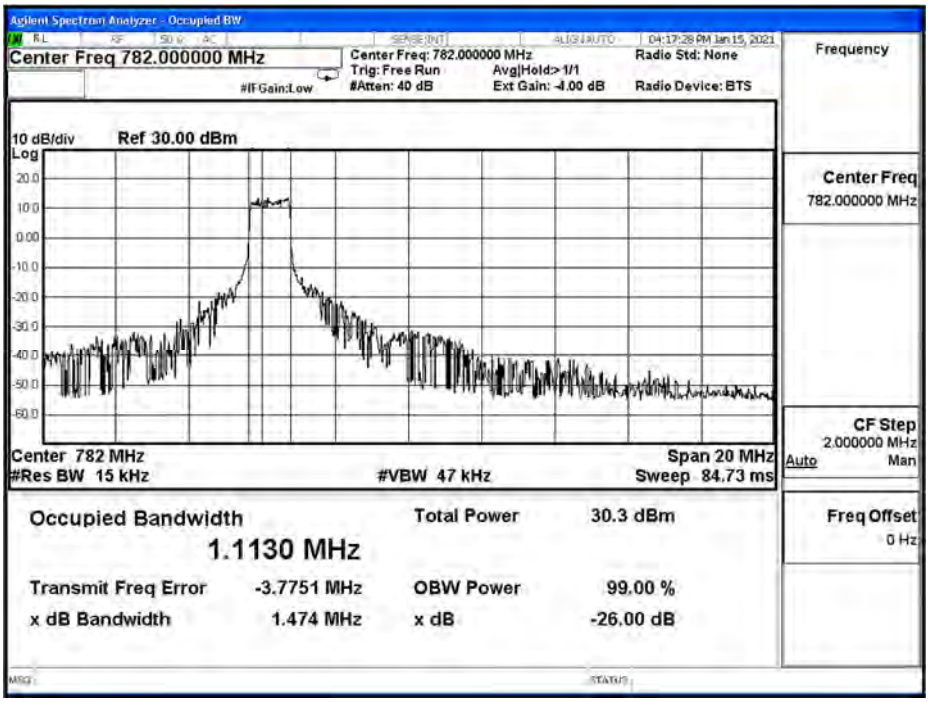
CAT-M1_B13_CH23255_5M__QPSK_6RB0



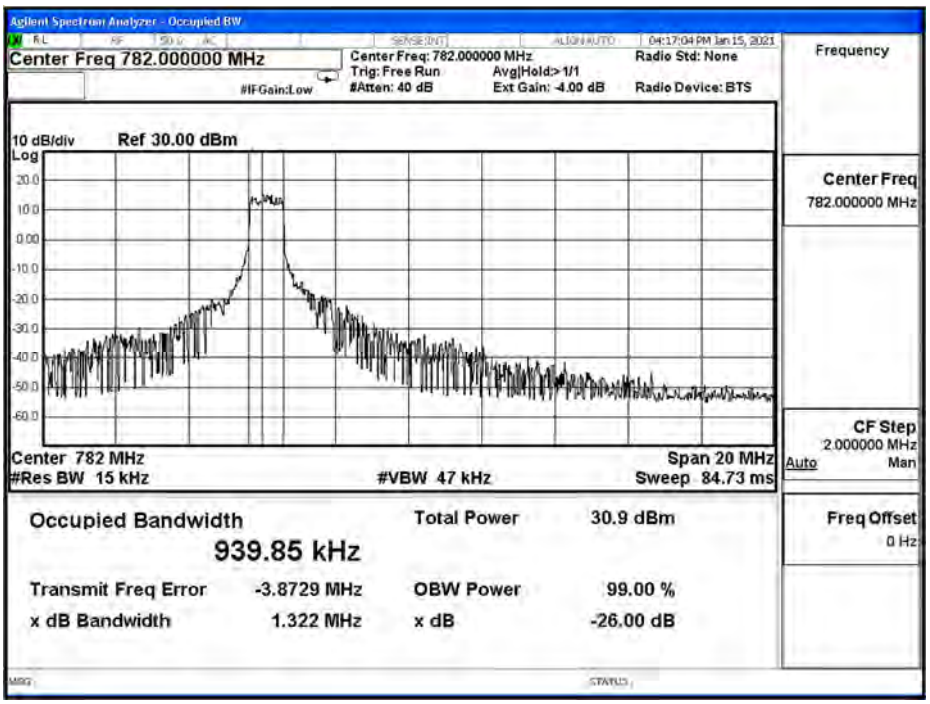
CAT-M1_B13_CH23255_5M_16-QAM_5RB1



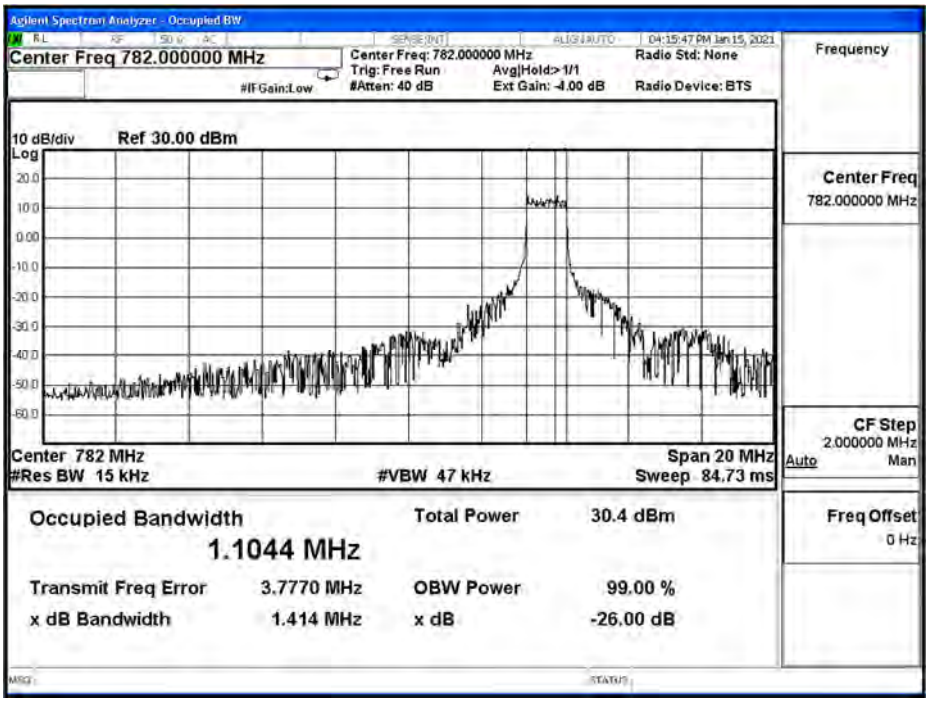
CAT-M1_B13__CH23230_10M__QPSK_6RB0_low



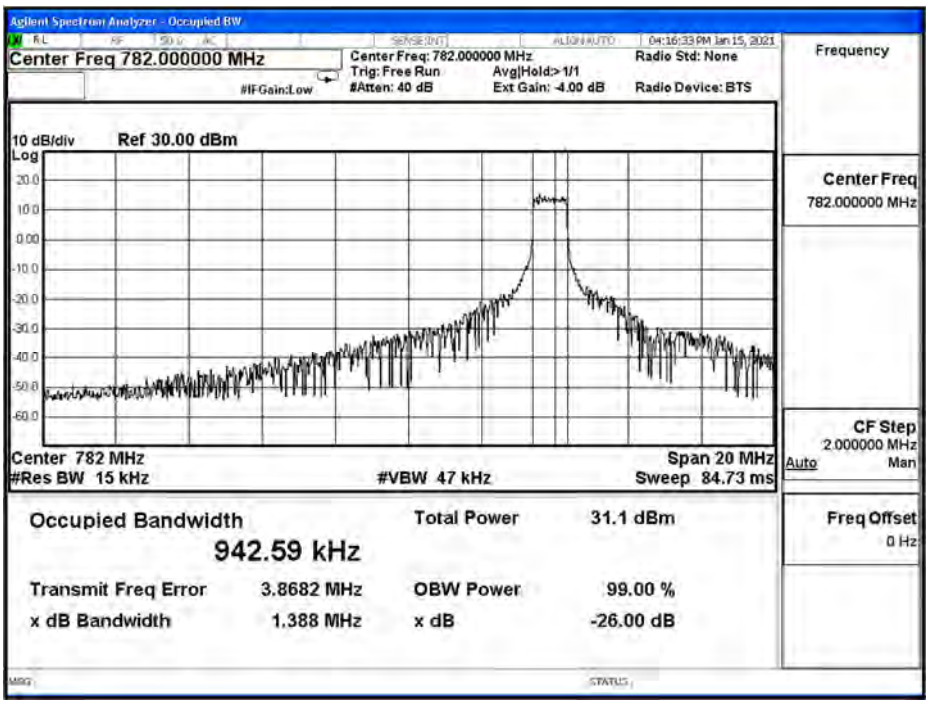
CAT-M1_B13__CH23230_10M_16-QAM_5RB0_low



CAT-M1_B13_CH23230_10M__QPSK_6RB0_high



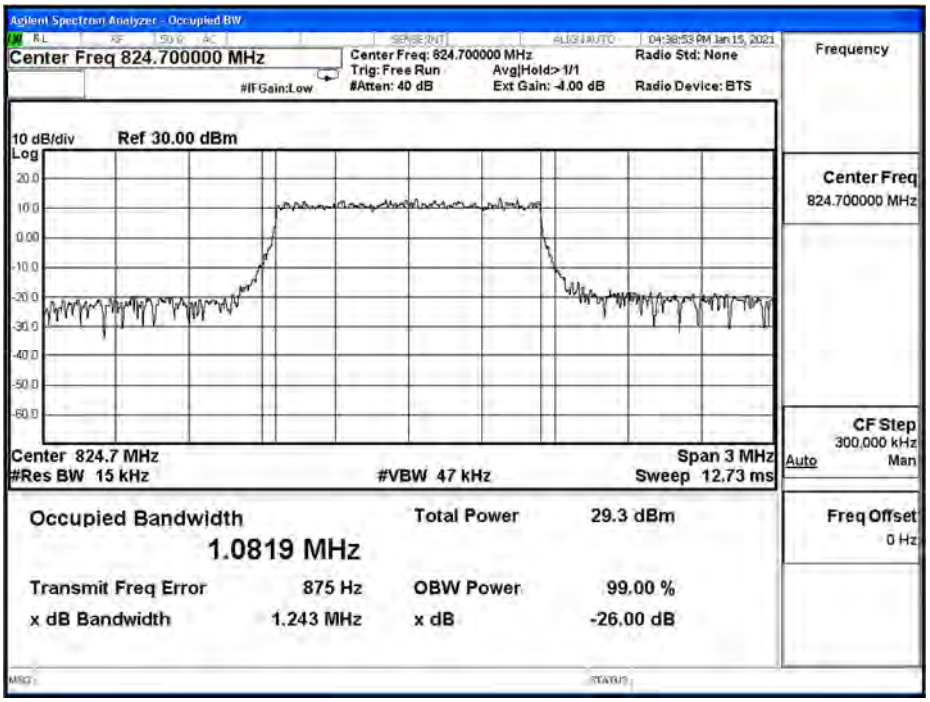
CAT-M1_B13_CH23230_10M_16-QAM_5RB1_high



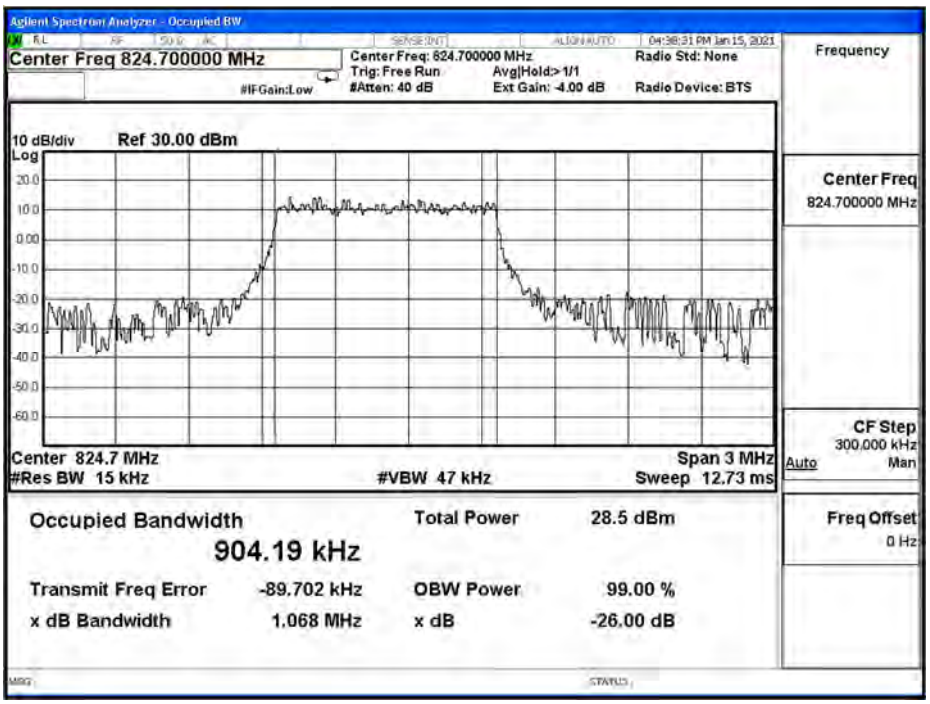
Product	Connectivity Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 6: Band26_Part22 Link		
Date of Test	2021/01/15	Test Site	SR12-H
Temperature (°C)	24	Humidity (%RH)	60

Bandwidth (MHz)	Modulation	Frequency (MHz)	Measure Level (MHz)		Limit (MHz)
			26dB BW	99% BW	
1.4M	QPSK	824.7	1.243	1.081	N/A
		836.5	1.250	1.085	N/A
		848.3	1.260	1.082	N/A
	16-QAM	824.7	1.068	0.904	N/A
		836.5	1.067	0.907	N/A
		848.3	1.101	0.908	N/A
3M	QPSK	825.5	1.324	1.098	N/A
		836.5	1.331	1.095	N/A
		847.5	1.323	1.096	N/A
	16-QAM	825.5	1.222	0.923	N/A
		836.5	1.211	0.924	N/A
		847.5	1.179	0.921	N/A
5M	QPSK	826.5	1.364	1.097	N/A
		836.5	1.349	1.095	N/A
		846.5	1.329	1.093	N/A
	16-QAM	826.5	1.194	0.928	N/A
		836.5	1.240	0.925	N/A
		846.5	1.209	0.925	N/A
10M	QPSK	829.0	1.428	1.113	N/A
		836.5	1.400	1.109	N/A
		844.0	1.429	1.113	N/A
	16-QAM	829.0	1.295	0.945	N/A
		836.5	1.374	0.946	N/A
		844.0	1.290	0.938	N/A
15M	QPSK	831.5	1.611	1.141	N/A
		836.5	1.576	1.146	N/A
		841.5	1.492	1.138	N/A
	16-QAM	831.5	1.344	0.971	N/A
		836.5	1.547	0.976	N/A
		841.5	1.287	0.957	N/A

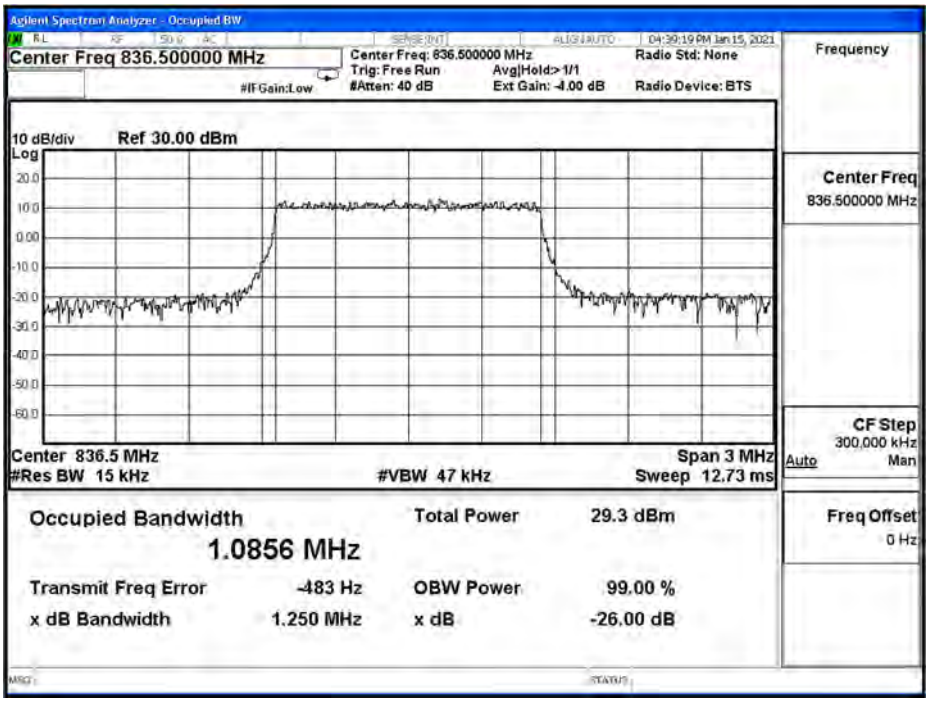
CAT-M1_B26_CH26797_1.4M__QPSK_6RB0



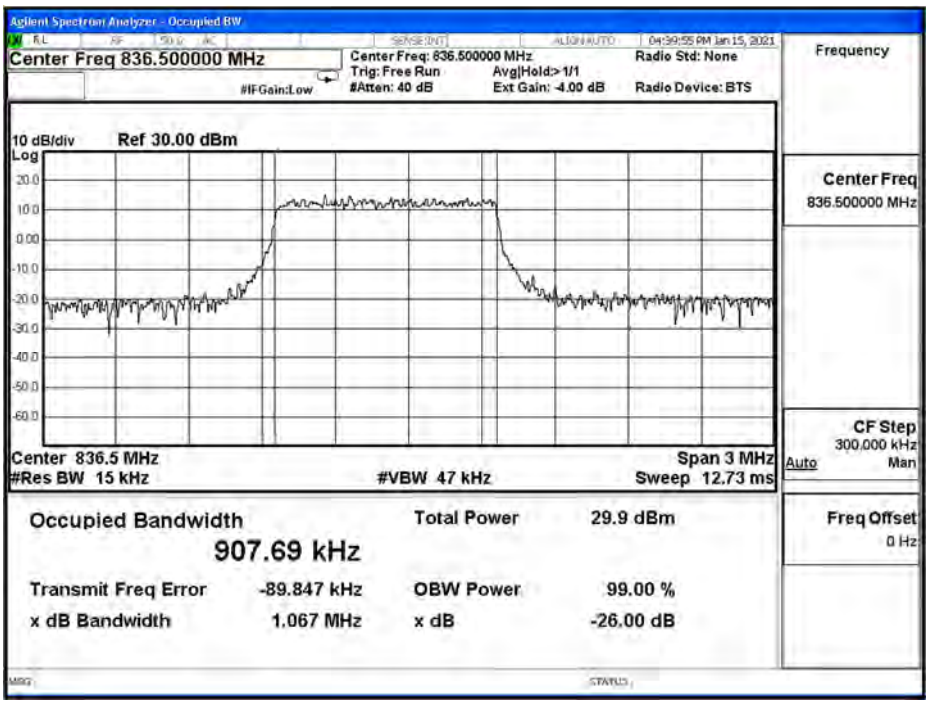
CAT-M1_B26_CH26797_1.4M_16-QAM_5RB1



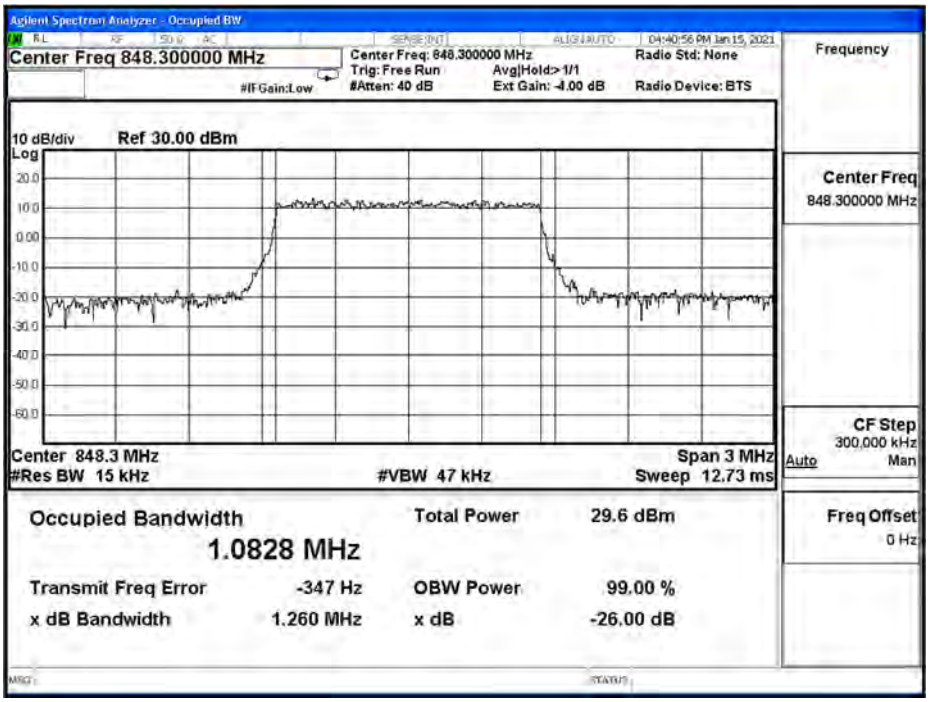
CAT-M1_B26_CH26915_1.4M__QPSK_6RB0



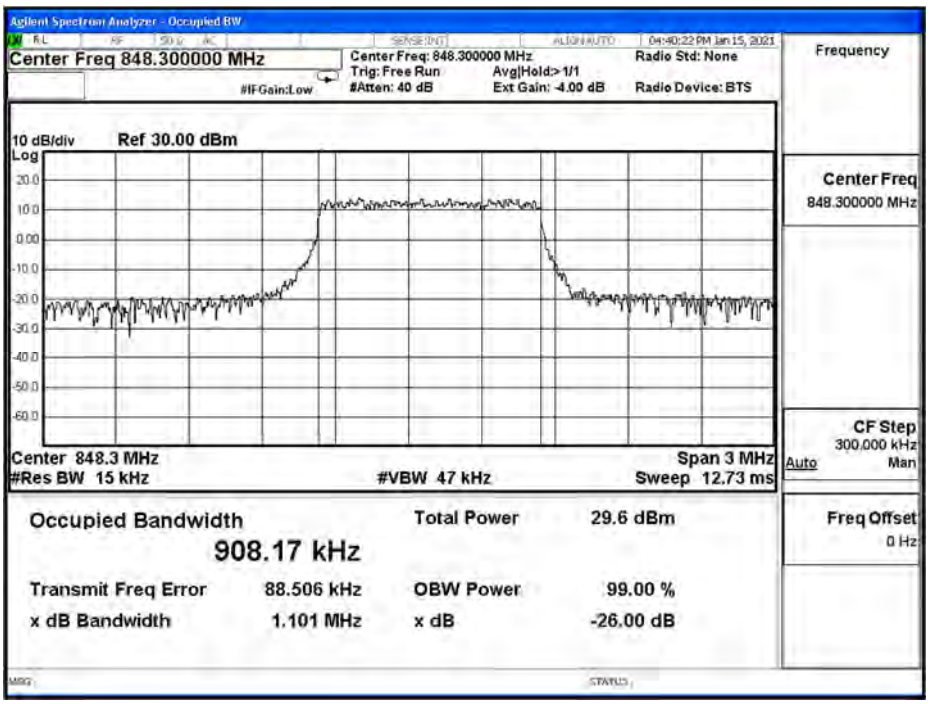
CAT-M1_B26_CH26915_1.4M_16-QAM_5RB1



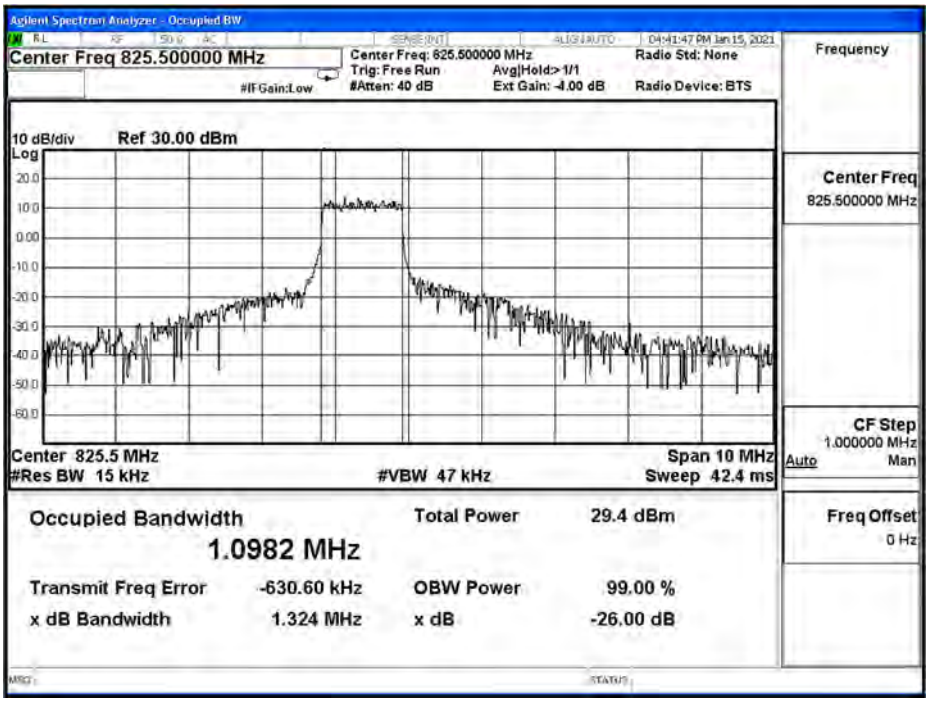
CAT-M1_B26_CH27033_1.4M__QPSK_6RB0



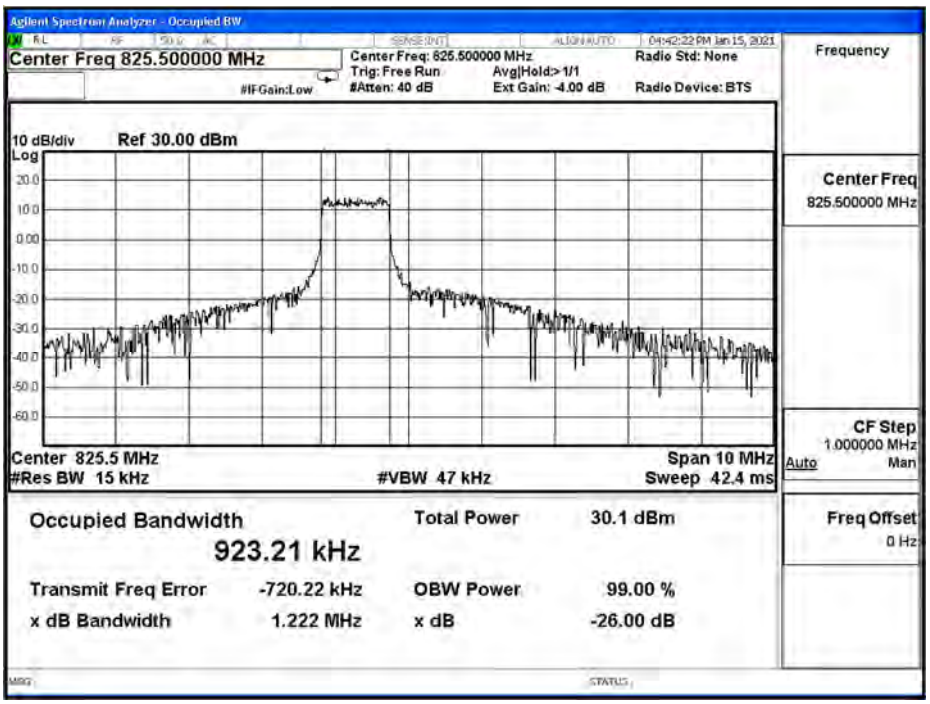
CAT-M1_B26_CH27033_1.4M_16-QAM_5RB1



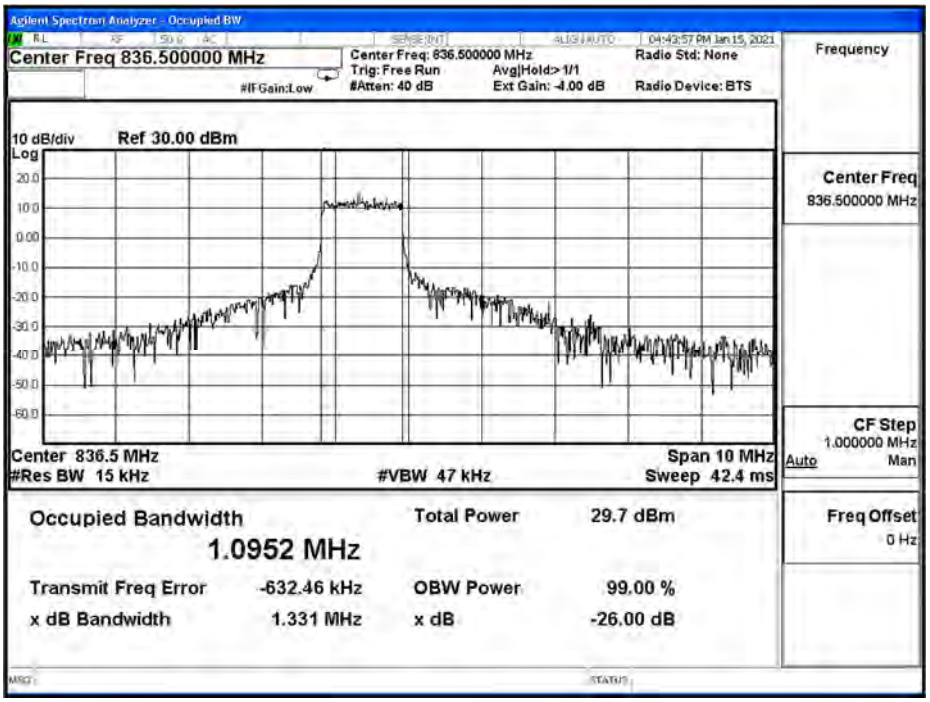
CAT-M1_B26_CH26805_3M__QPSK_6RB0



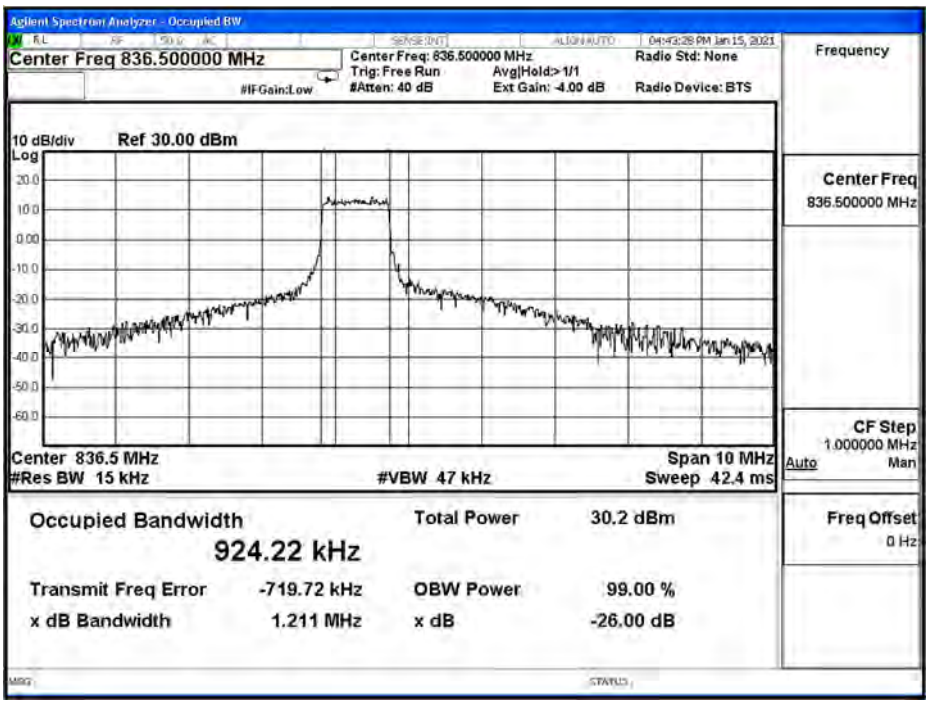
CAT-M1_B26_CH26805_3M_16-QAM_5RB1



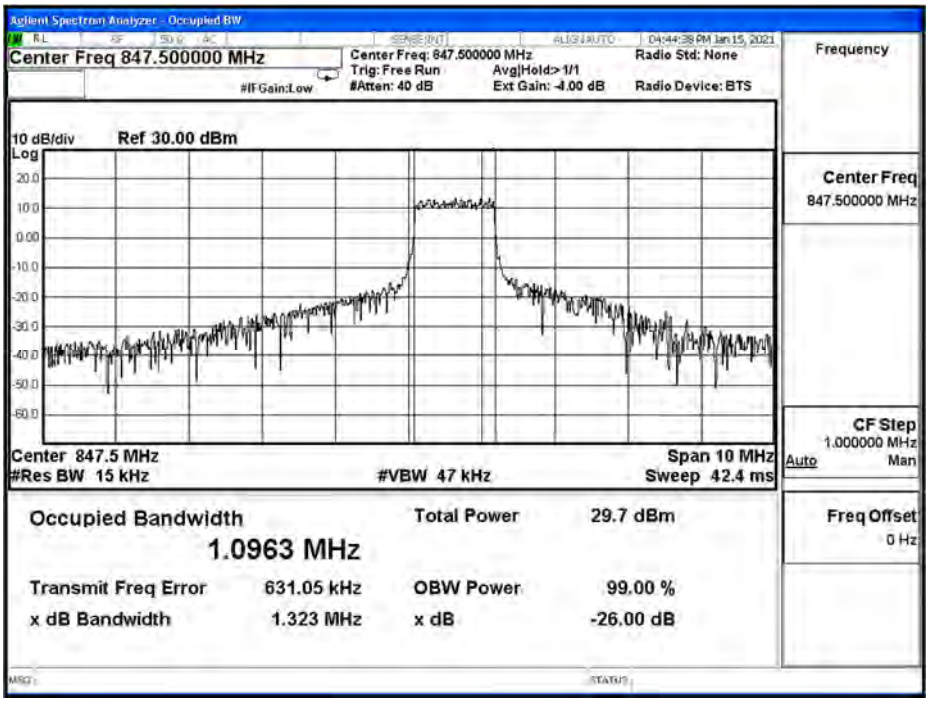
CAT-M1_B26_CH26915_3M__QPSK_6RB0



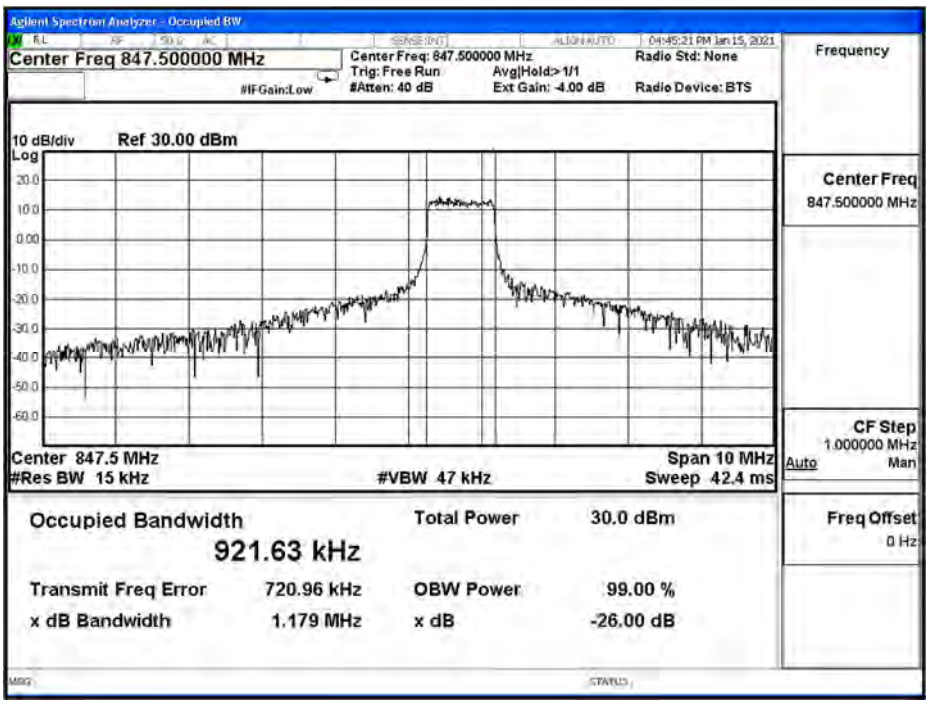
CAT-M1_B26_CH26915_3M_16-QAM_5RB1



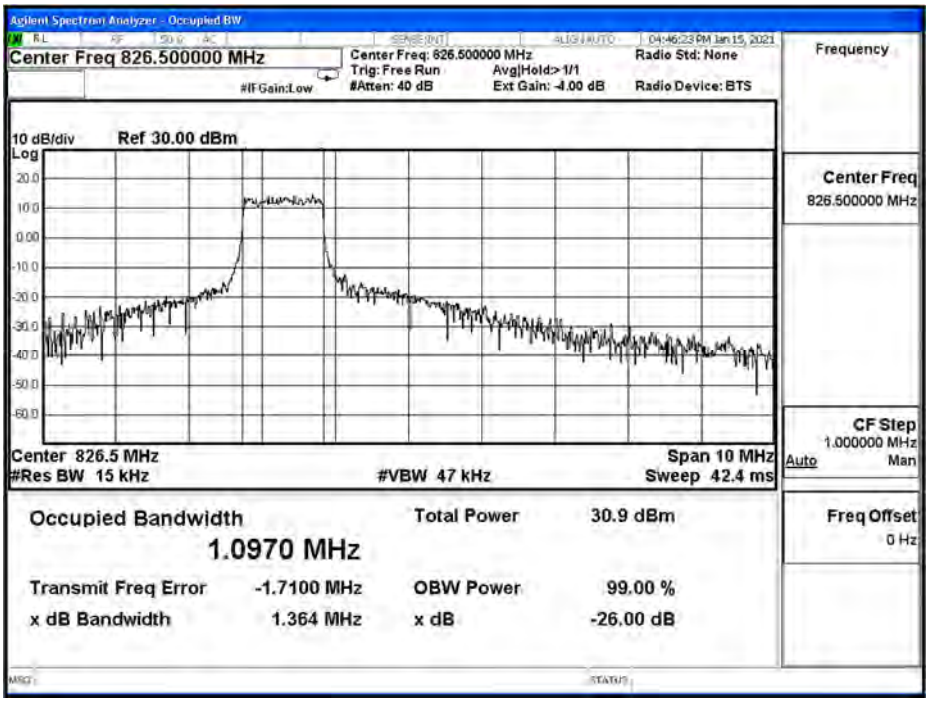
CAT-M1_B26_CH27025_3M__QPSK_6RB0



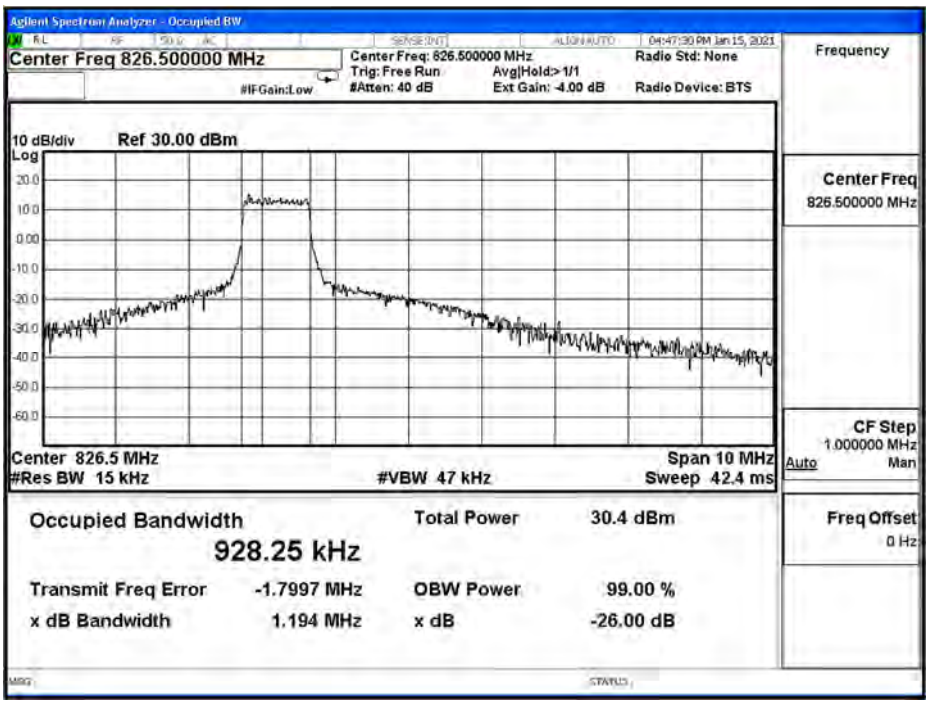
CAT-M1_B26_CH27025_3M_16-QAM_5RB1



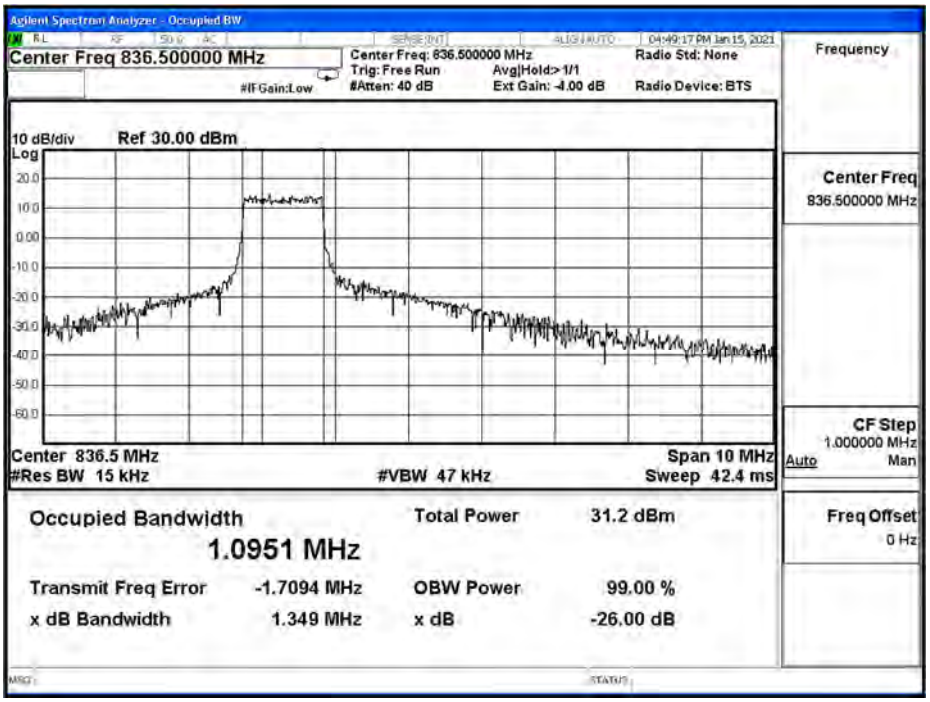
CAT-M1_B26_CH26815_5M__QPSK_6RB0



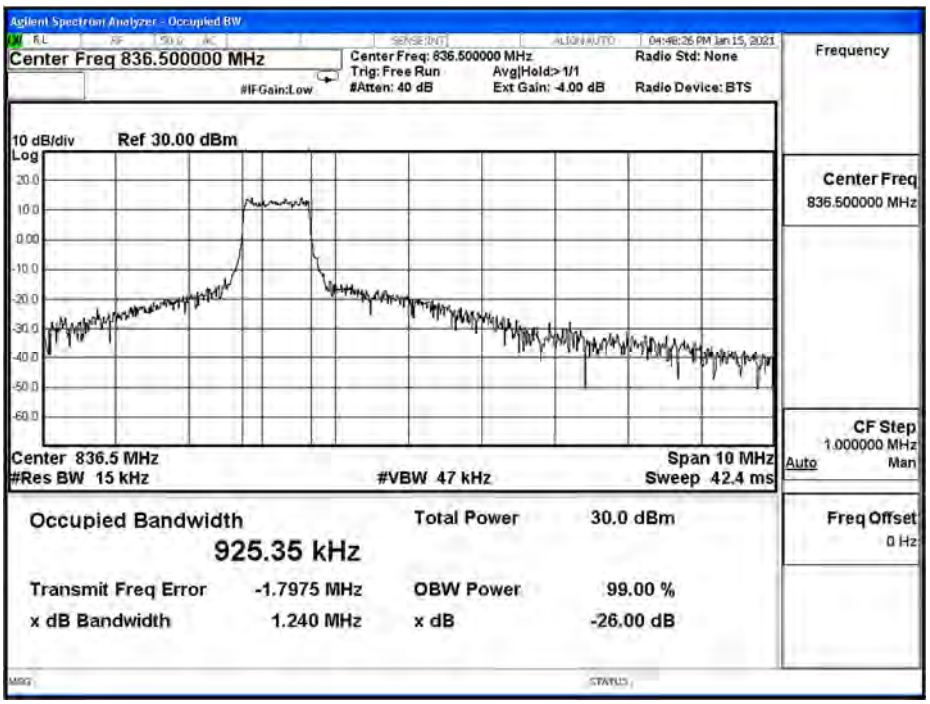
CAT-M1_B26_CH26815_5M_16-QAM_5RB1



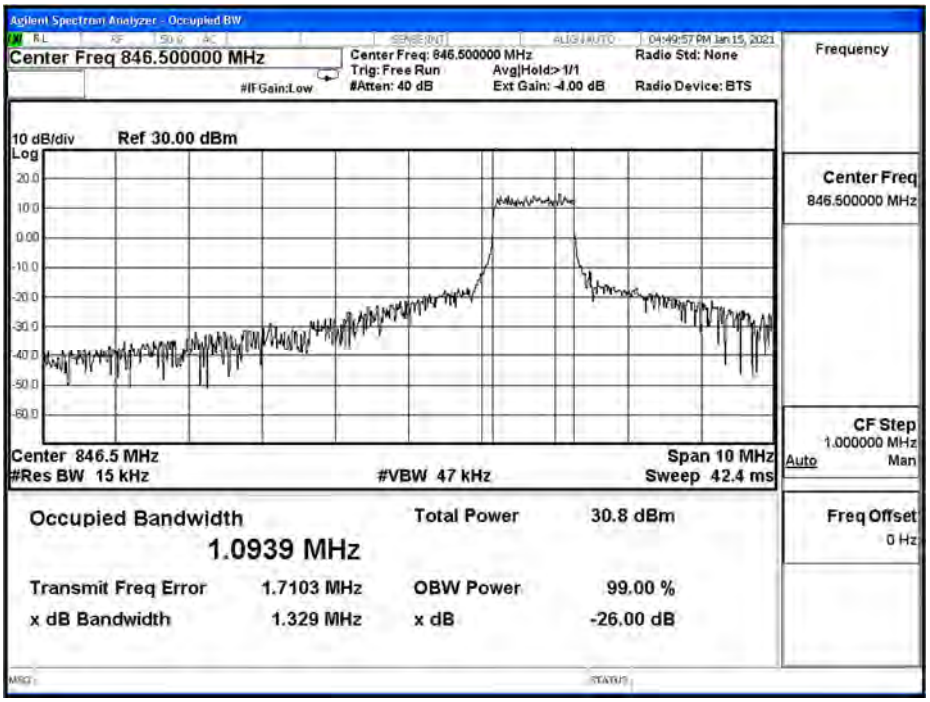
CAT-M1_B26_CH26915_5M__QPSK_6RB0



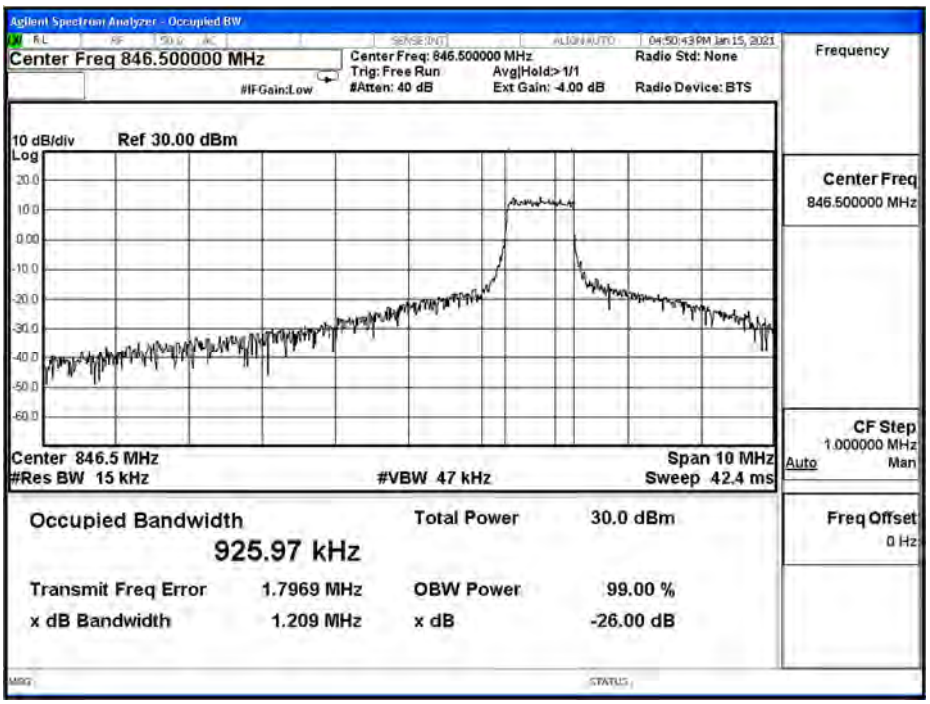
CAT-M1_B26_CH26915_5M_16-QAM_5RB1



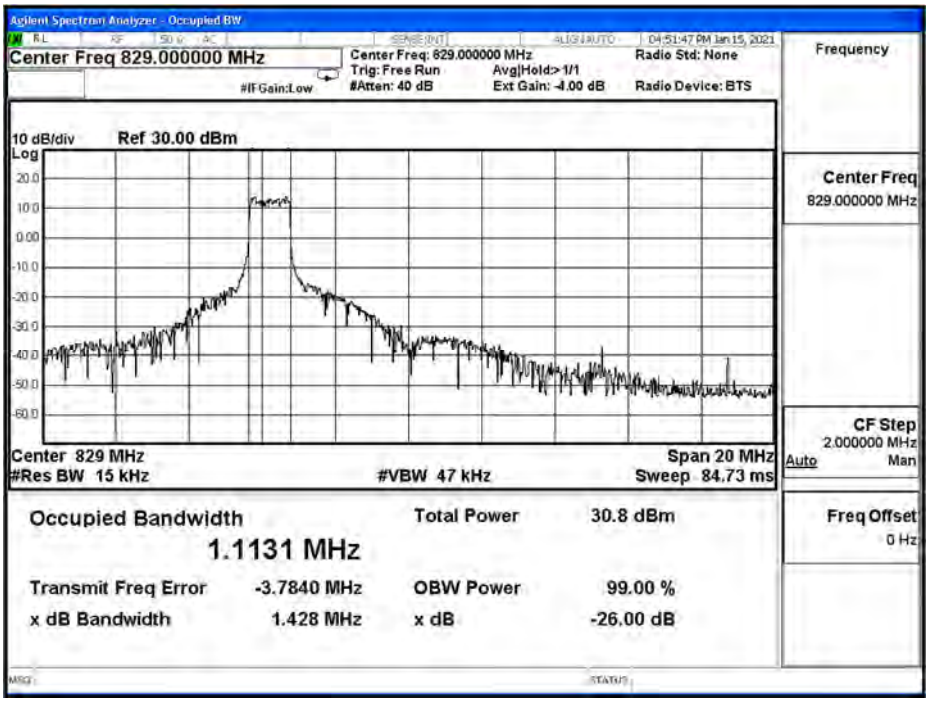
CAT-M1_B26_CH27015_5M__QPSK_6RB0



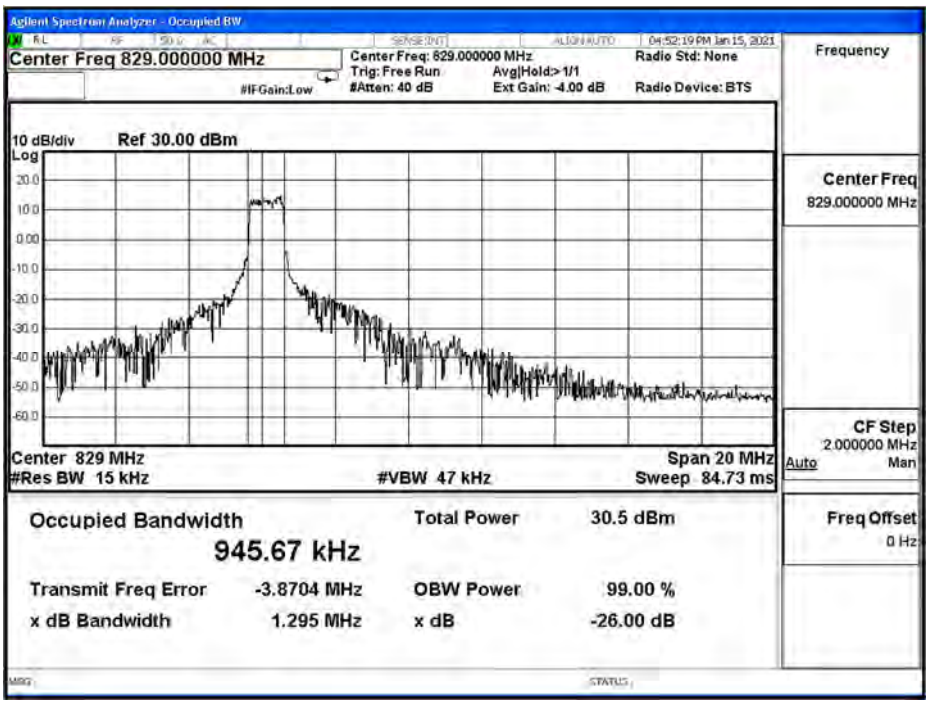
CAT-M1_B26_CH27015_5M_16-QAM_5RB1



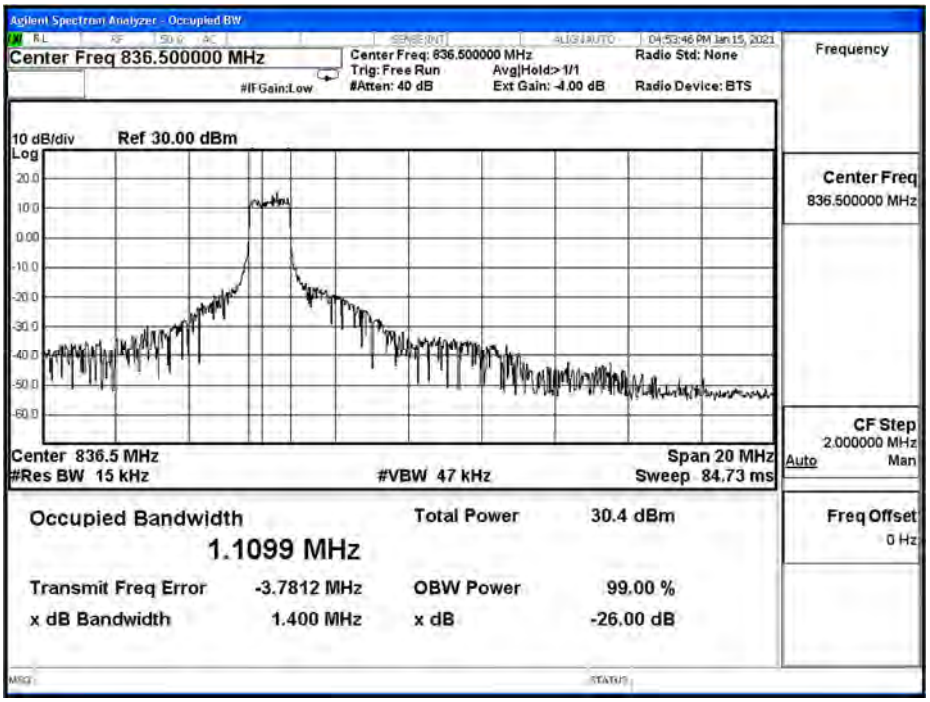
CAT-M1_B26_CH26840_10M__QPSK_6RB0



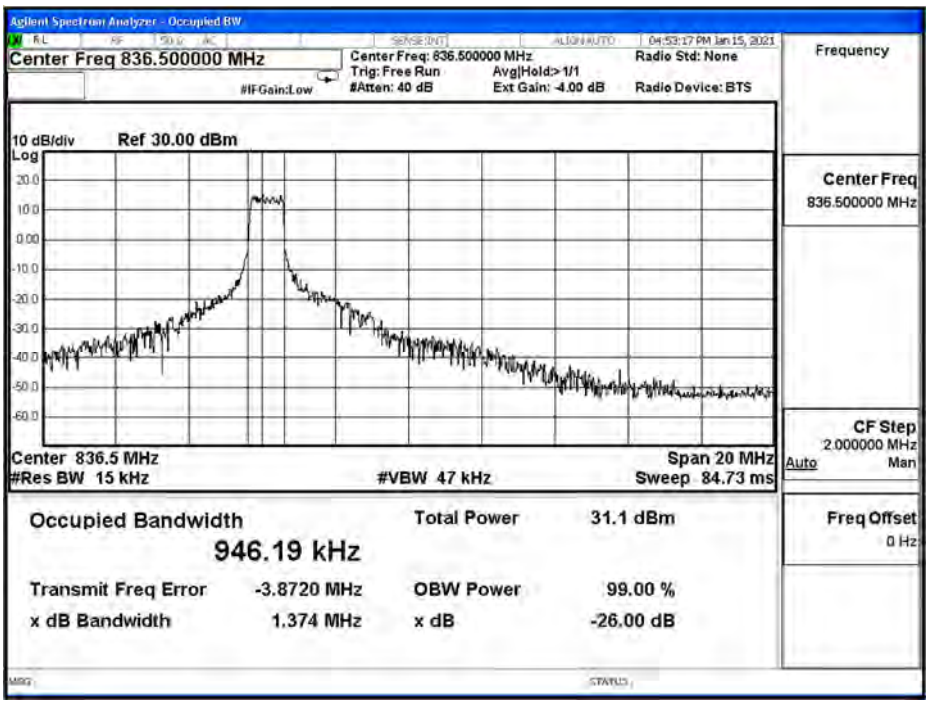
CAT-M1_B26_CH26840_10M_16-QAM_5RB1



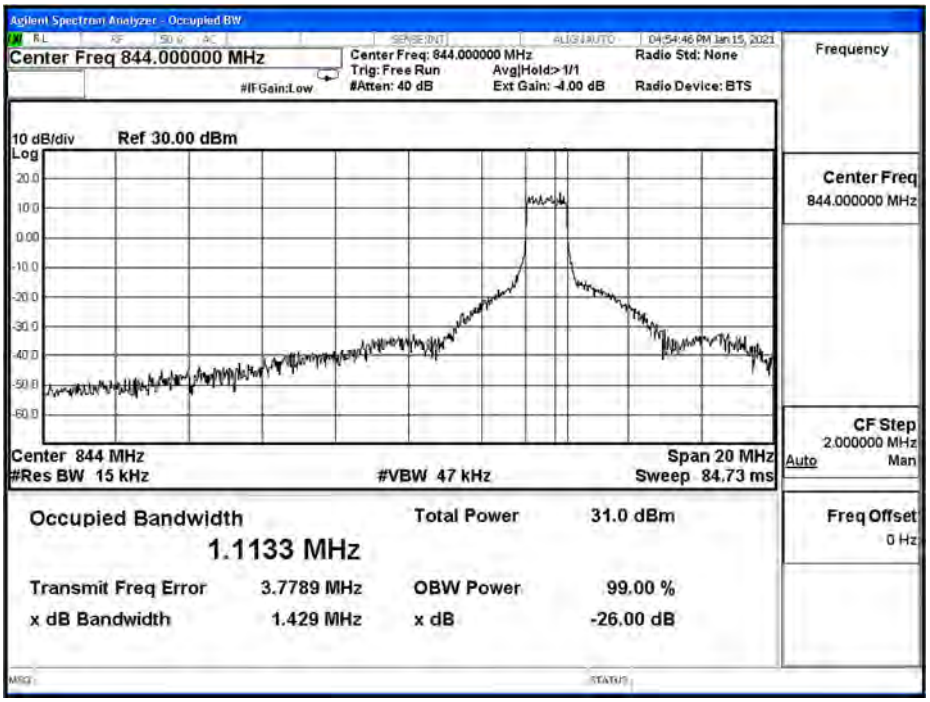
CAT-M1_B26_CH26915_10M__QPSK_6RB0



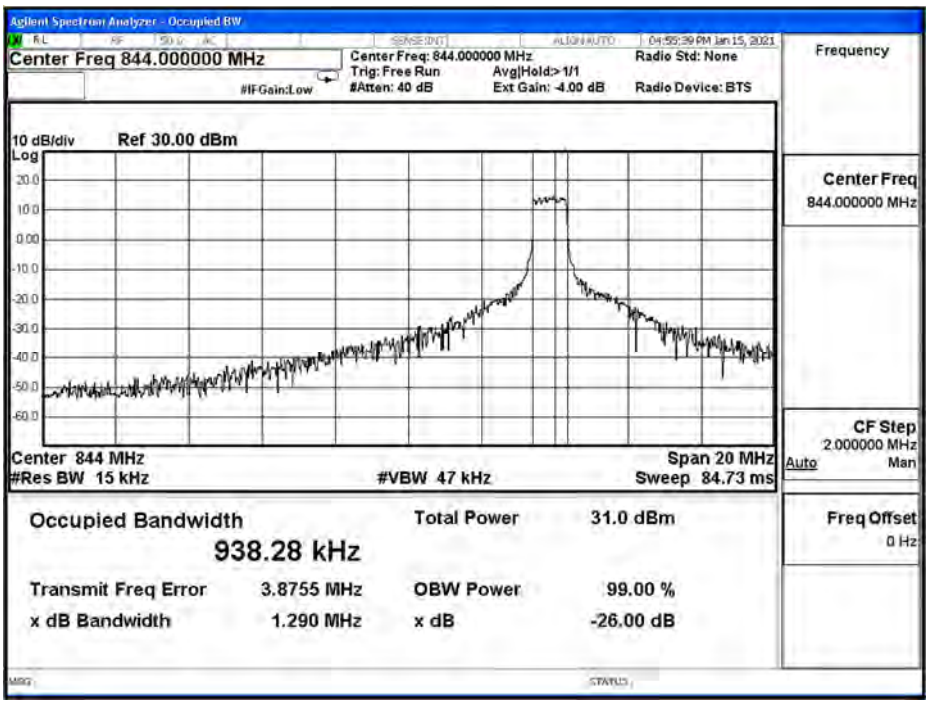
CAT-M1_B26_CH26915_10M_16-QAM_5RB1



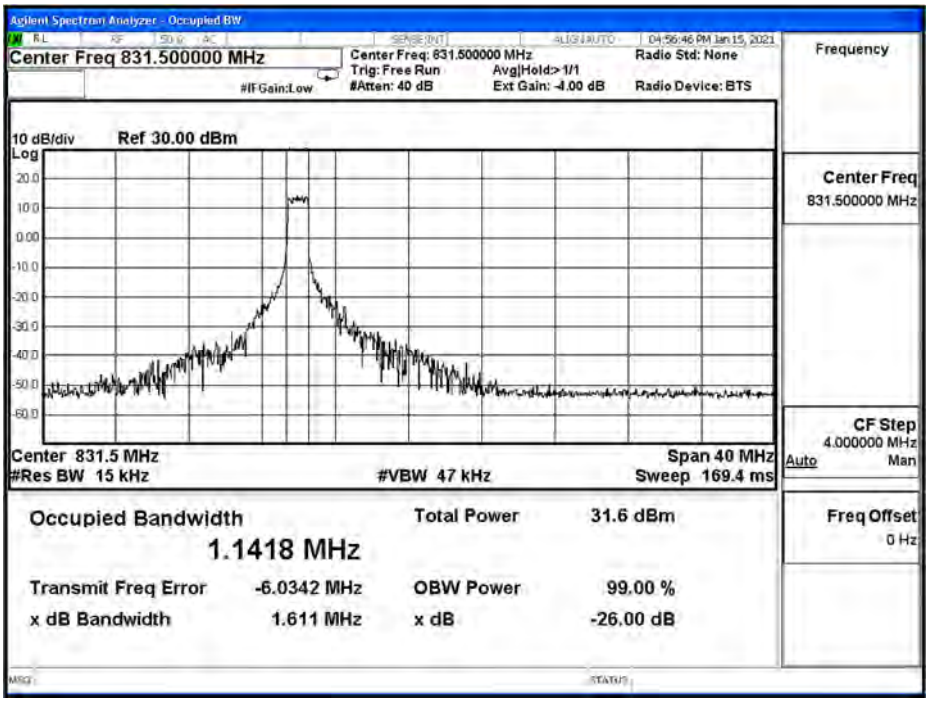
CAT-M1_B26_CH26990_10M__QPSK_6RB0



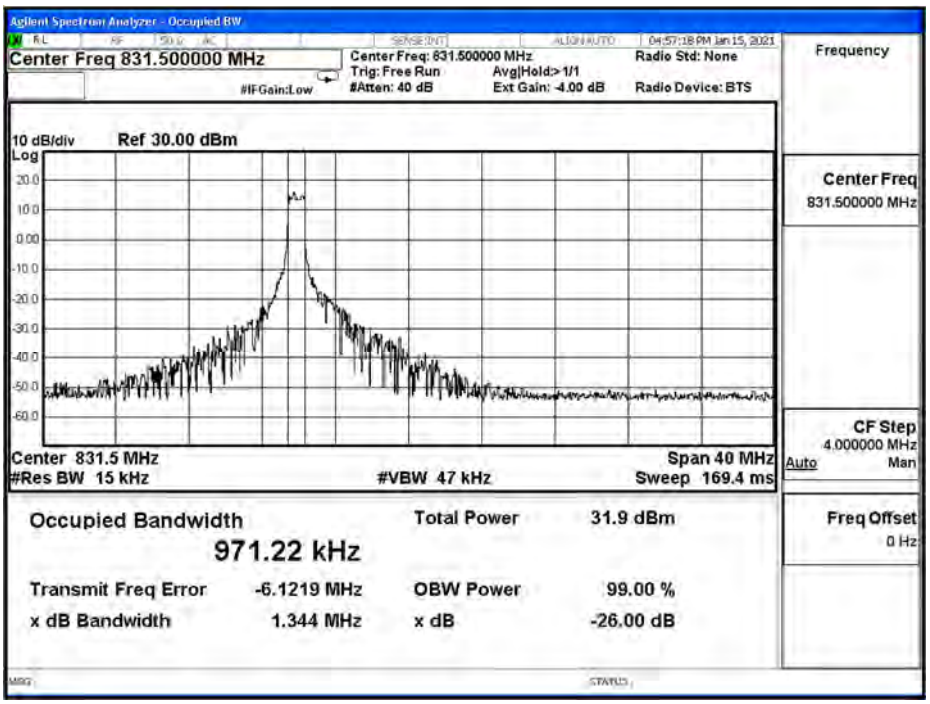
CAT-M1_B26_CH26990_10M_16-QAM_5RB1



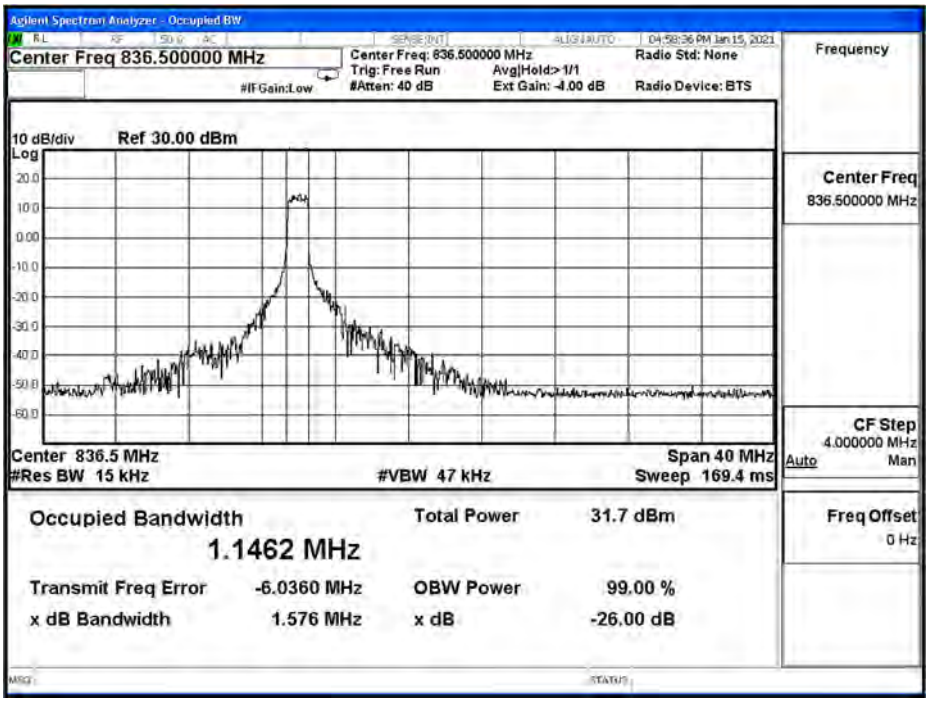
CAT-M1_B26_CH26865_15M__QPSK_6RB0



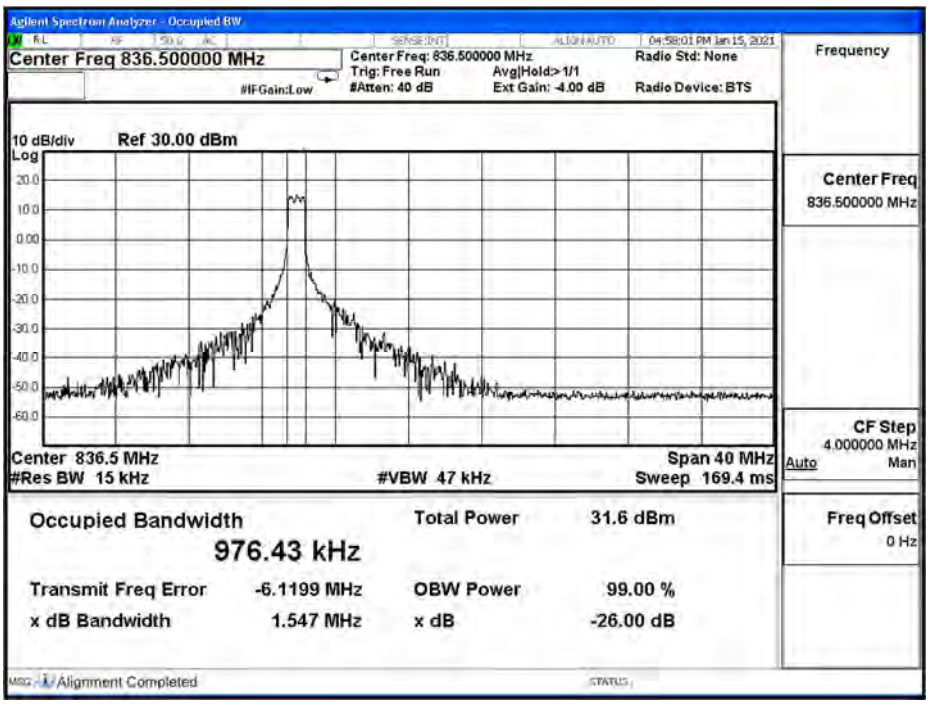
CAT-M1_B26_CH26865_15M_16-QAM_5RB1



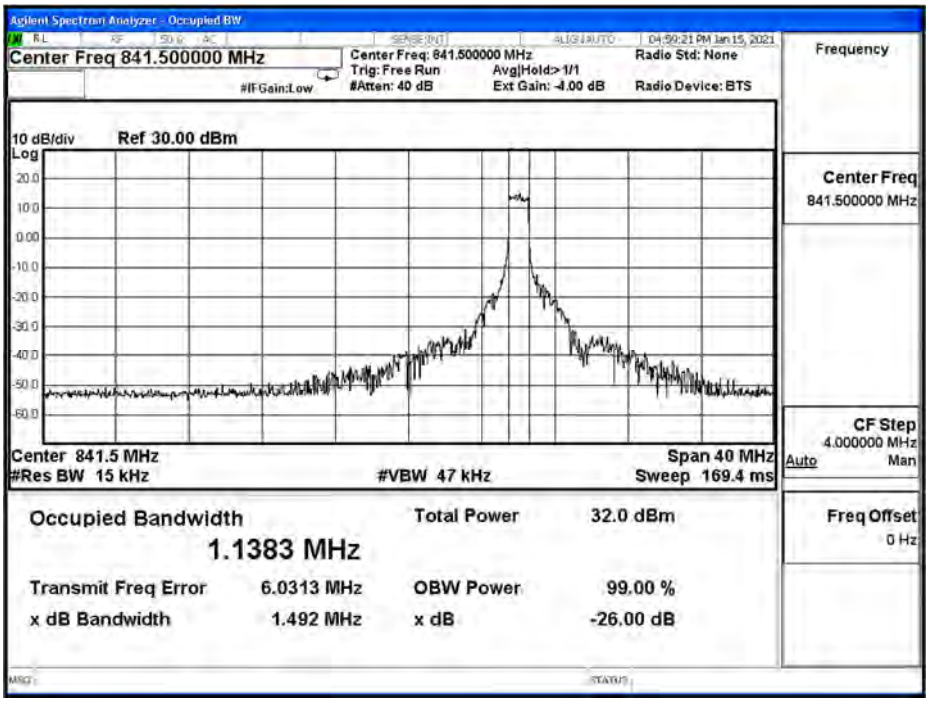
CAT-M1_B26_CH26915_15M__QPSK_6RB0



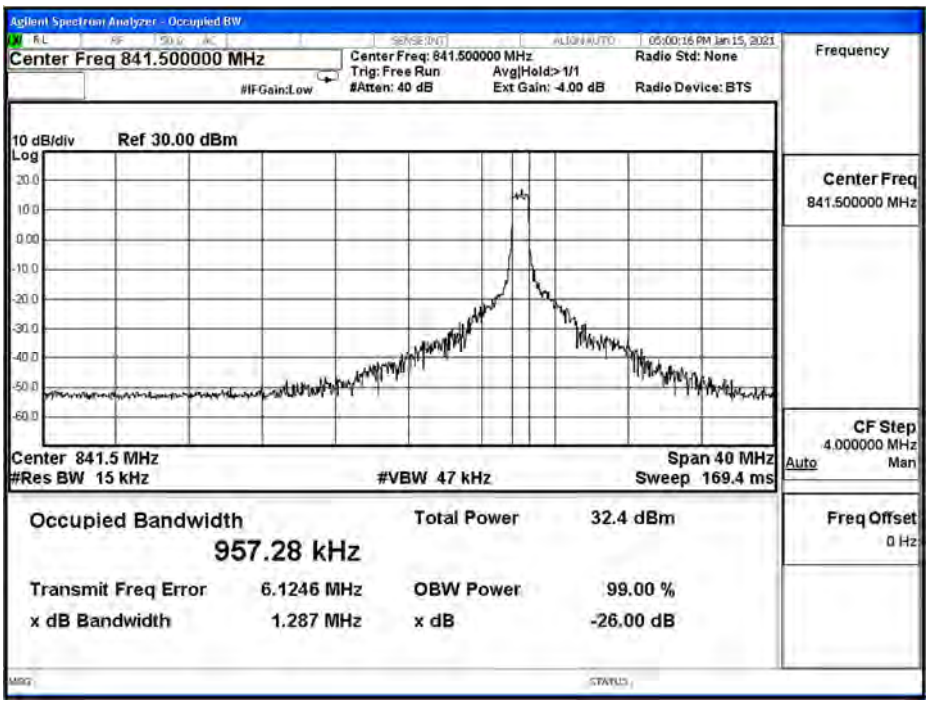
CAT-M1_B26_CH26915_15M_16-QAM_5RB1



CAT-M1_B26_CH26965_15M__QPSK_6RB0



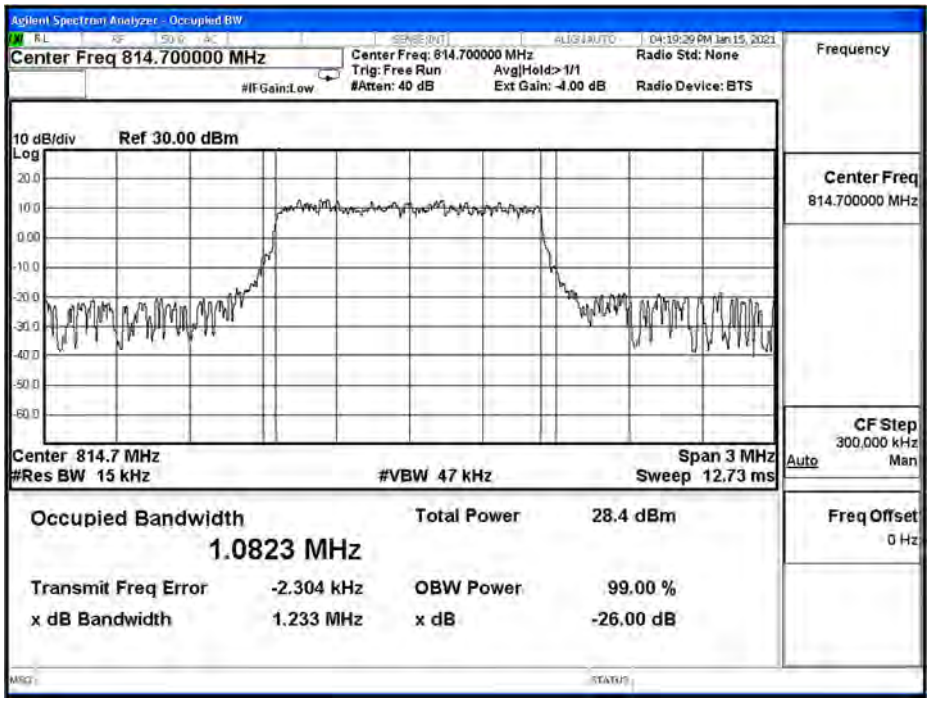
CAT-M1_B26_CH26965_15M_16-QAM_5RB1



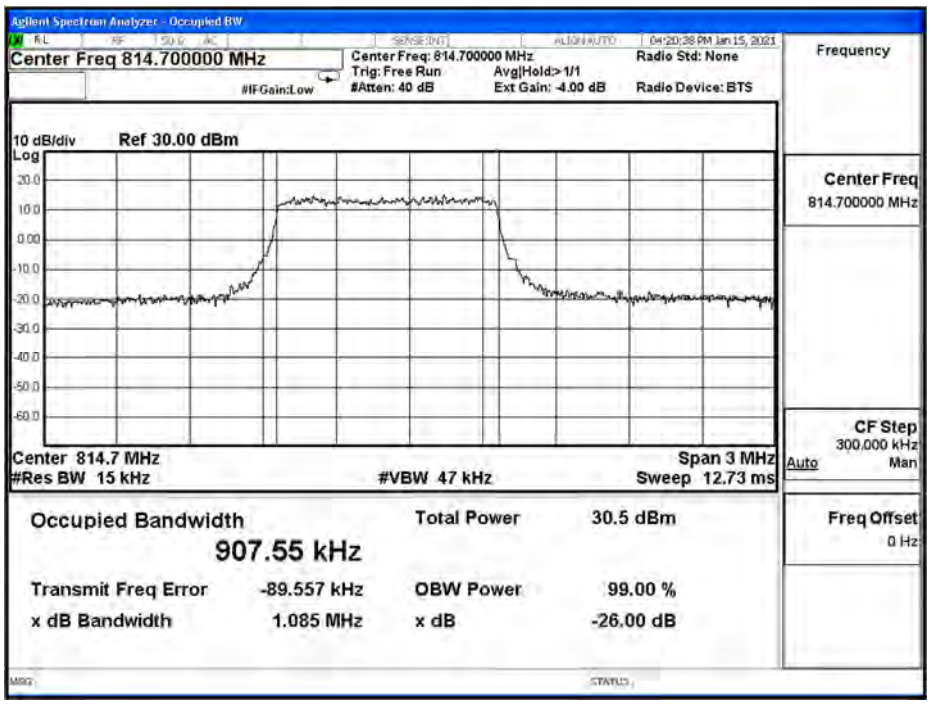
Product	Connectivity Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 7: Band26_Part90 Link		
Date of Test	2021/01/15	Test Site	SR12-H
Temperature (°C)	24	Humidity (%RH)	60

Bandwidth (MHz)	Modulation	Frequency (MHz)	Measure Level (MHz)		Limit (MHz)
			26dB BW	99% BW	
1.4M	QPSK	814.7	1.233	1.082	N/A
		819.0	1.234	1.083	N/A
		823.3	1.255	1.080	N/A
	16-QAM	814.7	1.085	0.907	N/A
		819.0	1.092	0.908	N/A
		823.3	1.077	0.907	N/A
3M	QPSK	815.5	1.368	1.094	N/A
		819.0	1.345	1.092	N/A
		822.5	1.332	1.091	N/A
	16-QAM	815.5	1.182	0.919	N/A
		819.0	1.272	0.923	N/A
		822.5	1.201	0.922	N/A
5M	QPSK	816.5	1.346	1.096	N/A
		819.0	1.335	1.094	N/A
		821.5	1.377	1.098	N/A
	16-QAM	816.5	1.221	0.928	N/A
		819.0	1.192	0.920	N/A
		821.5	1.275	0.927	N/A
10M	QPSK	819 low	1.446	1.098	N/A
			1.429	1.104	N/A
	16-QAM	819 high	1.330	0.947	N/A
			1.432	0.939	N/A

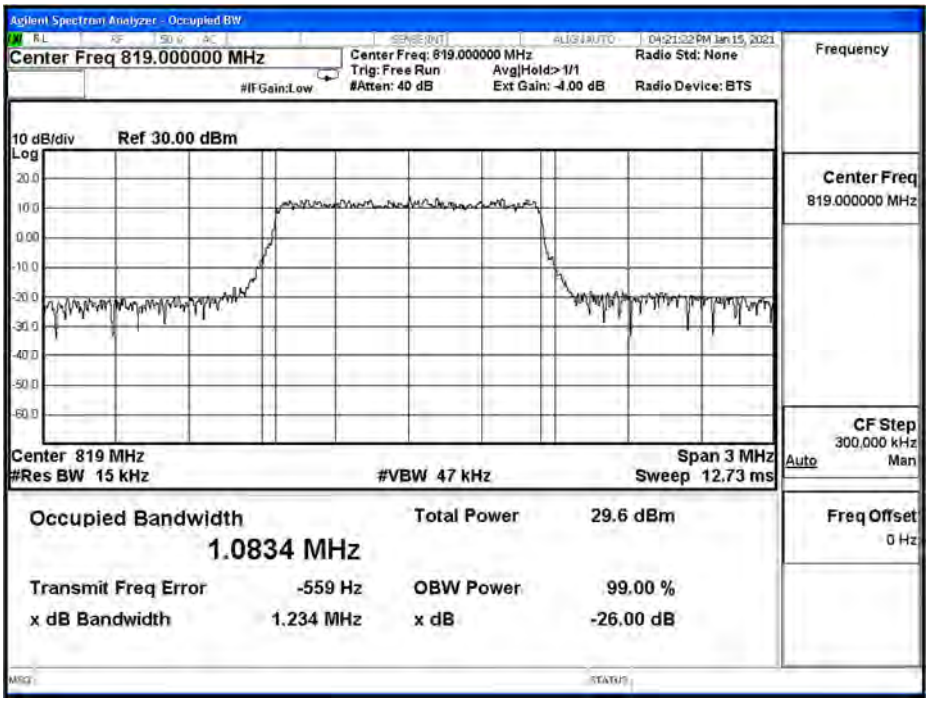
CAT-M1_B26_CH26697_1.4M__QPSK_6RB0



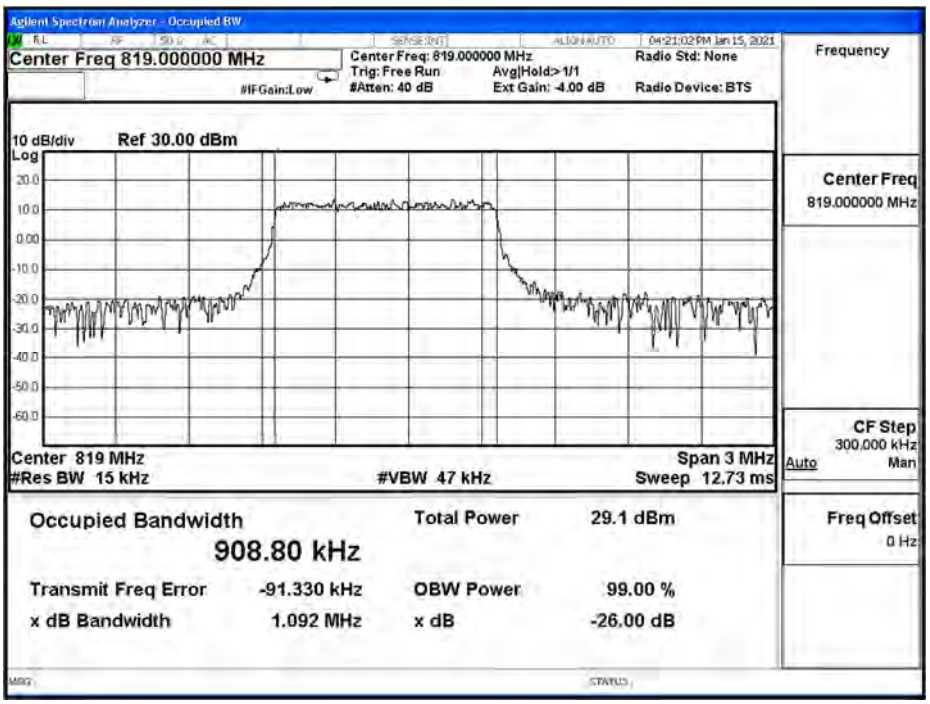
CAT-M1_B26_CH26697_1.4M_16-QAM_5RB1



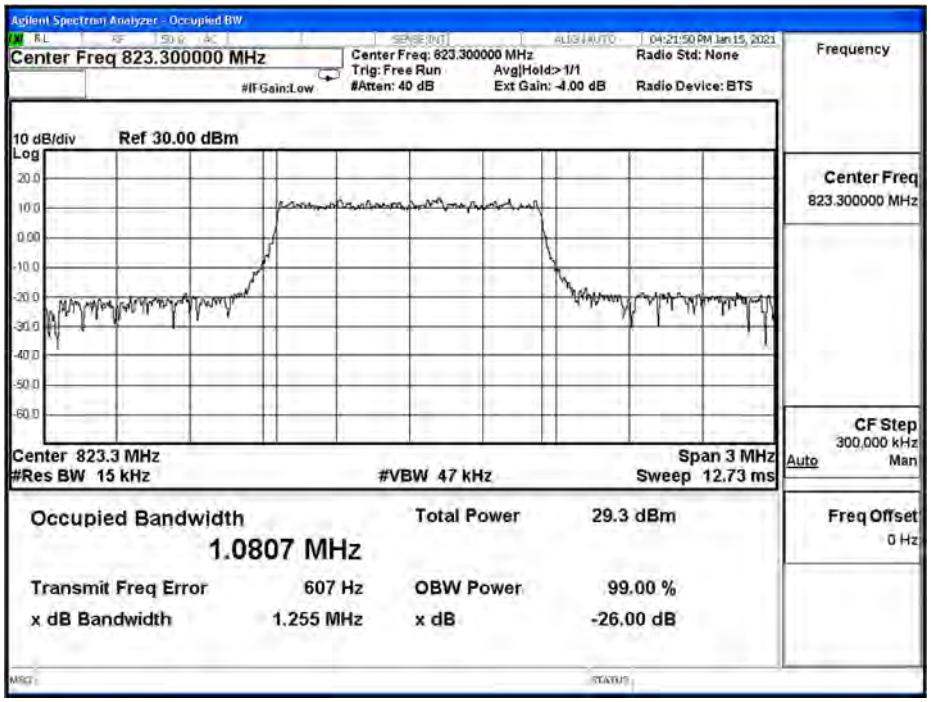
CAT-M1_B26_CH26740_1.4M__QPSK_6RB0



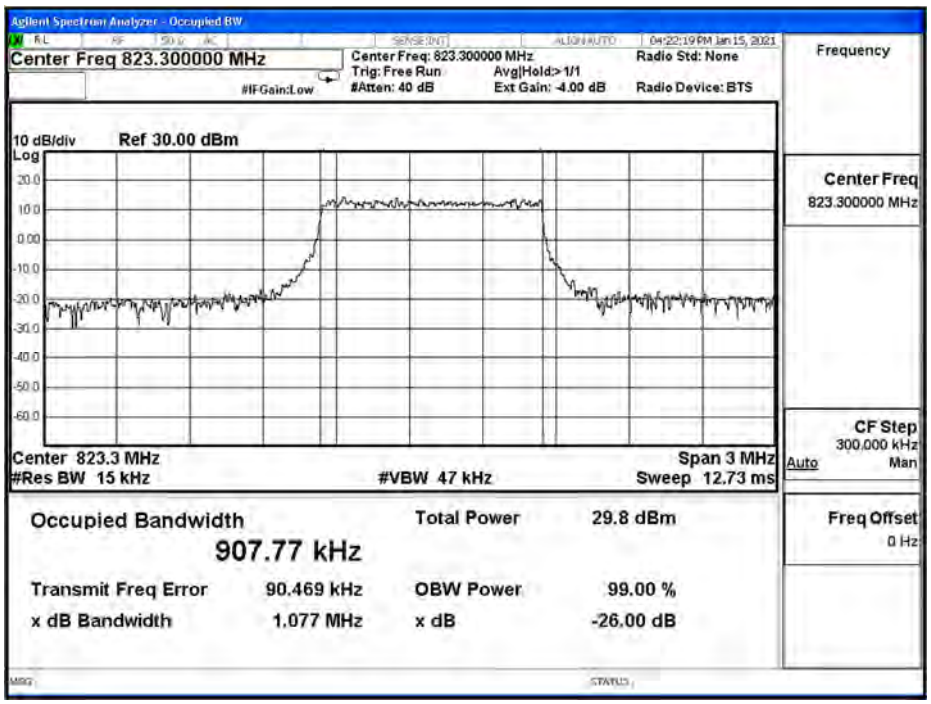
CAT-M1_B26_CH26740_1.4M_16-QAM_5RB1



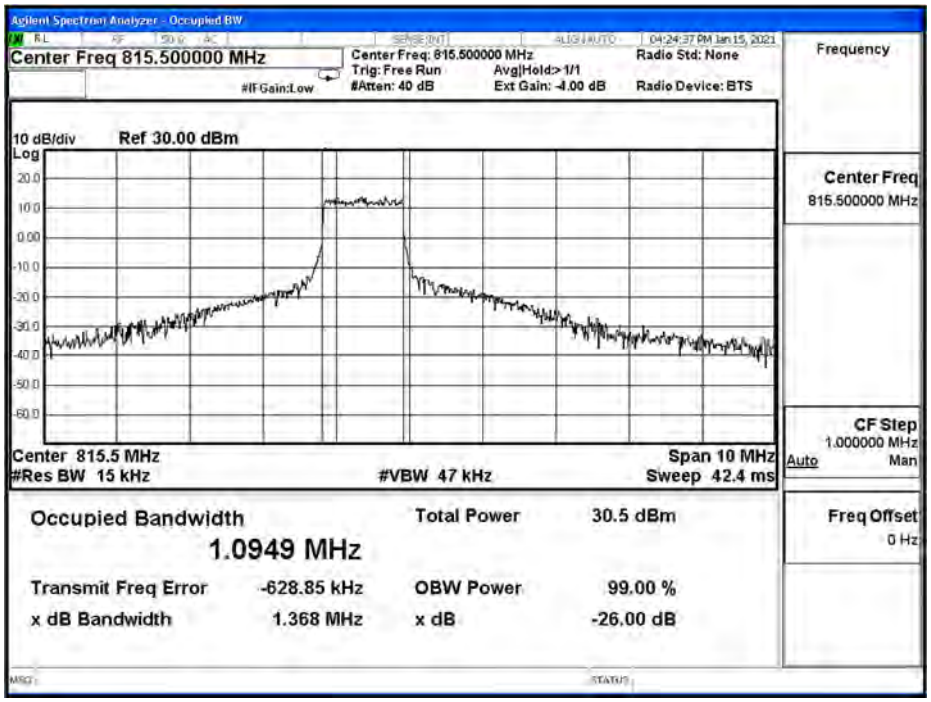
CAT-M1_B26_CH26783_1.4M__QPSK_6RB0



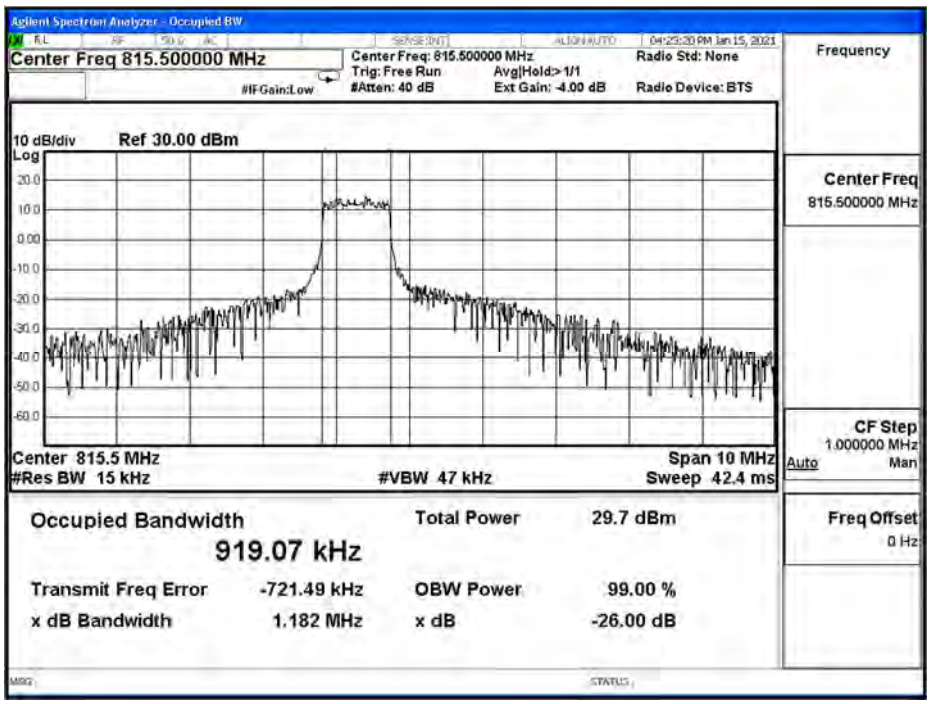
CAT-M1_B26_CH26783_1.4M_16-QAM_5RB1



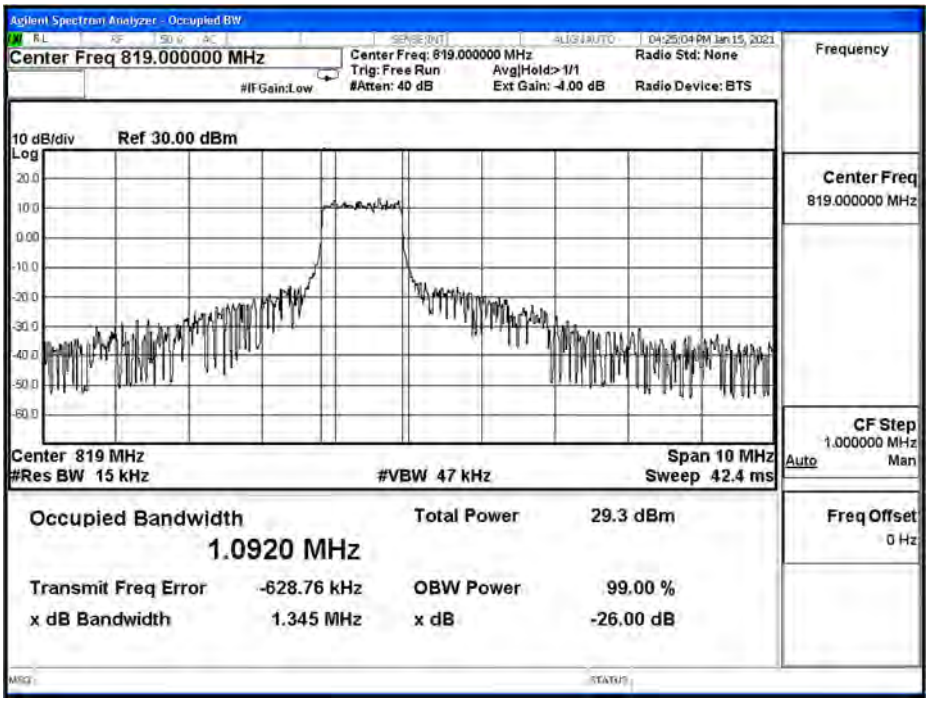
CAT-M1_B26_CH26705_3M__QPSK_6RB0



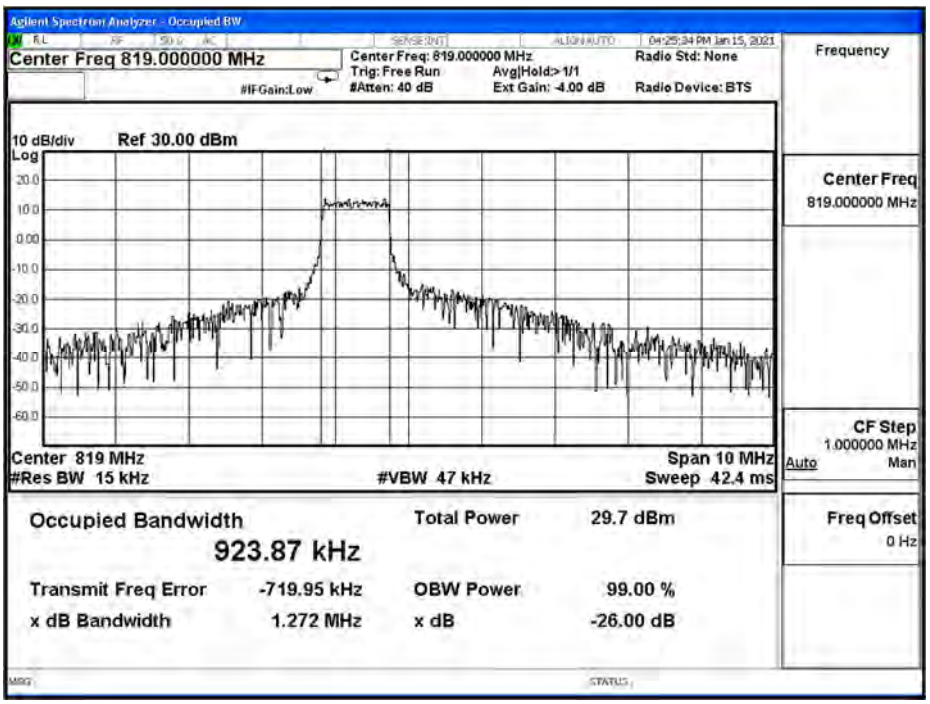
CAT-M1_B26_CH26705_3M_16-QAM_5RB1



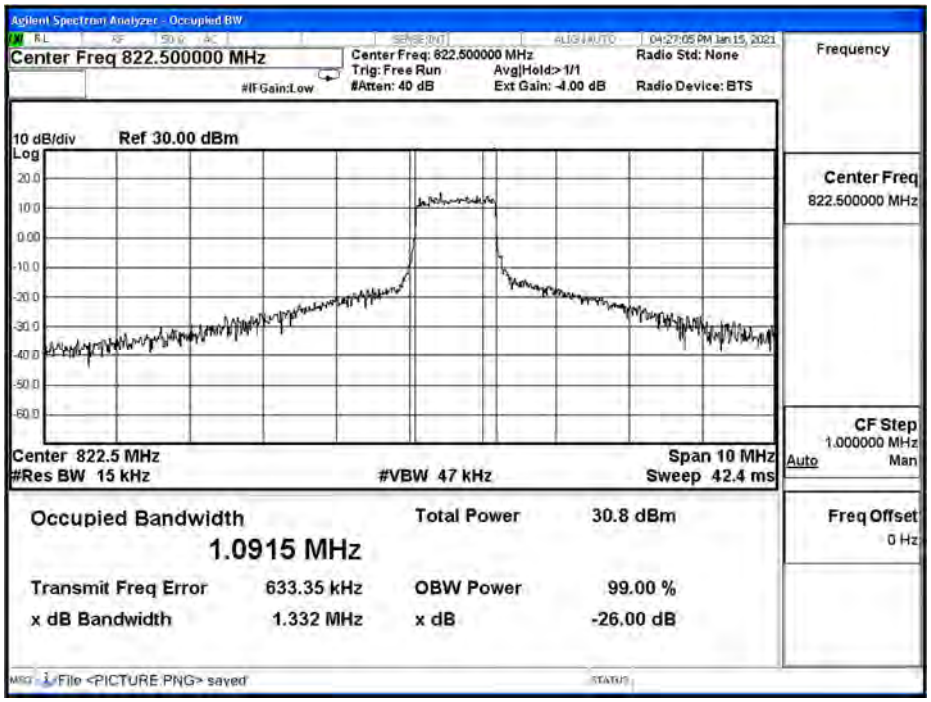
CAT-M1_B26_CH26740_3M__QPSK_6RB0



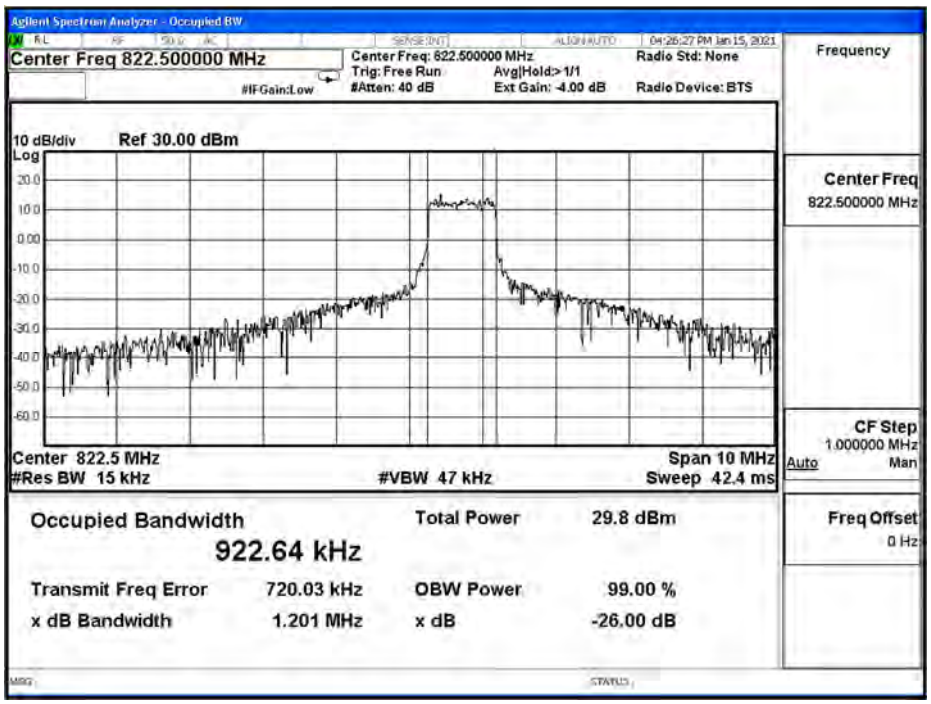
CAT-M1_B26_CH26740_3M_16-QAM_5RB1



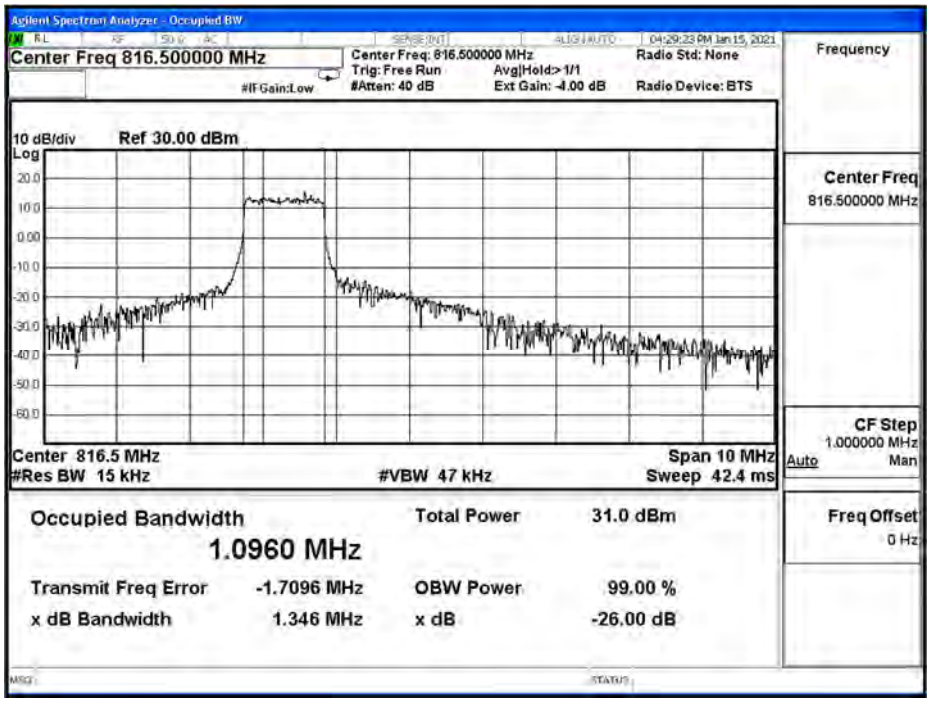
CAT-M1_B26_CH26775_3M__QPSK_6RB0



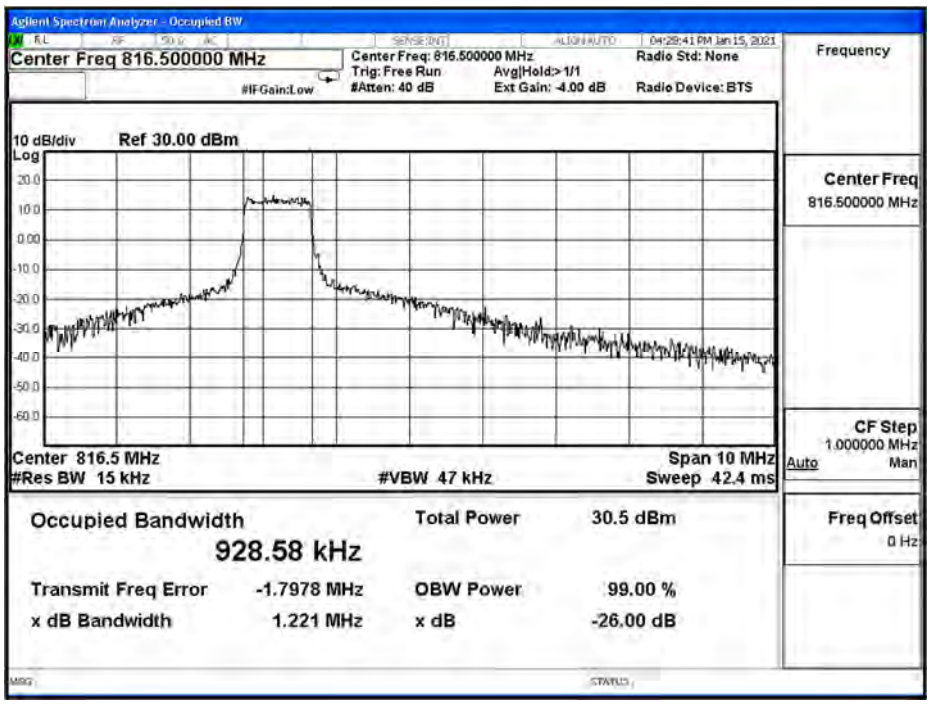
CAT-M1_B26_CH26775_3M_16-QAM_5RB1



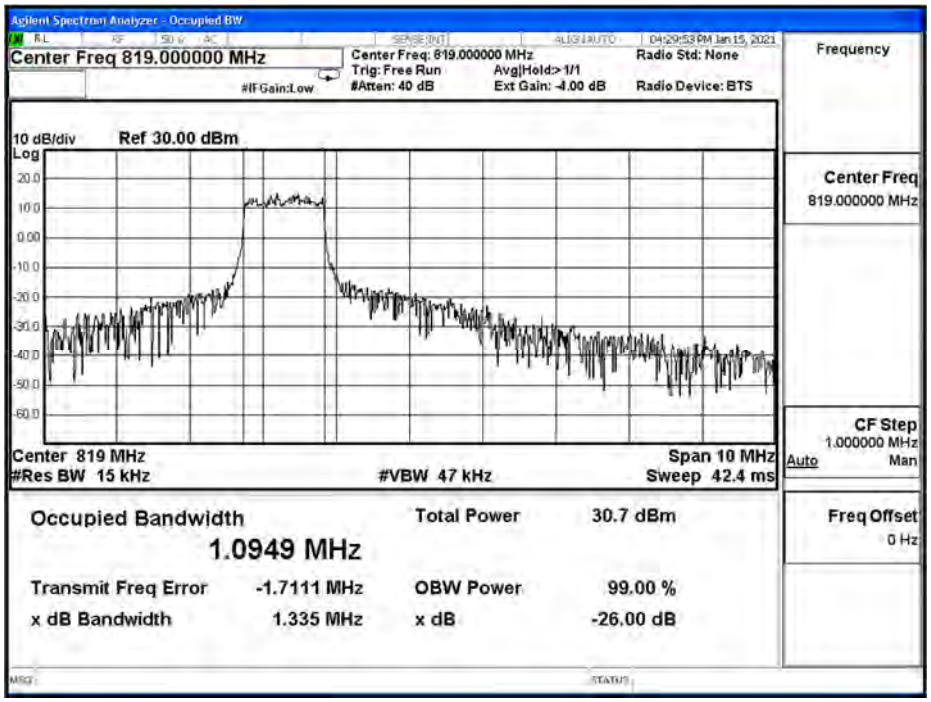
CAT-M1_B26_CH26715_5M__QPSK_6RB0



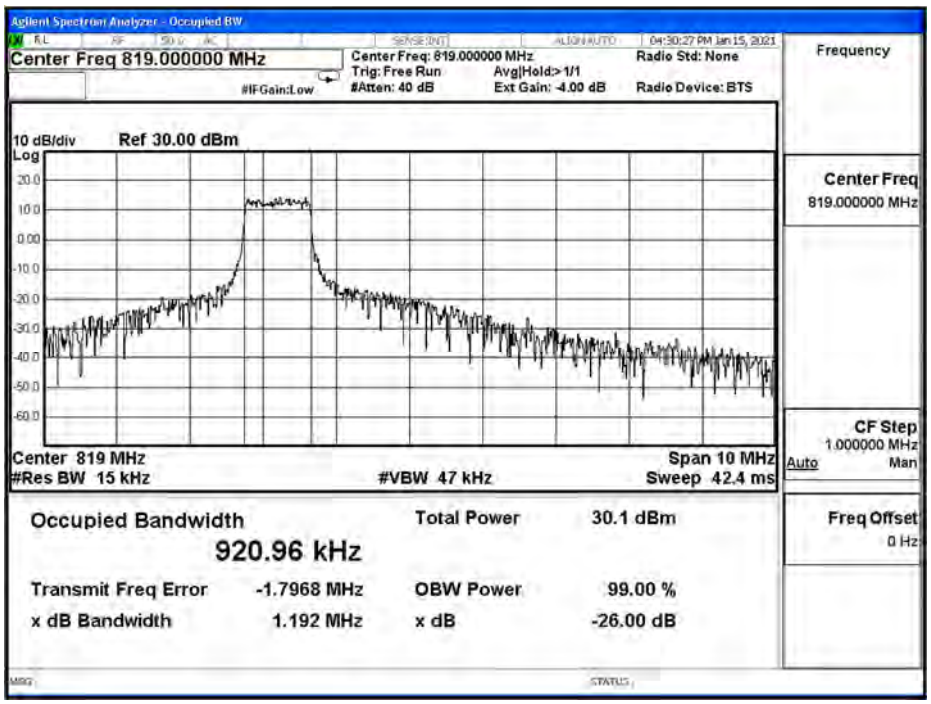
CAT-M1_B26_CH26715_5M_16-QAM_5RB1



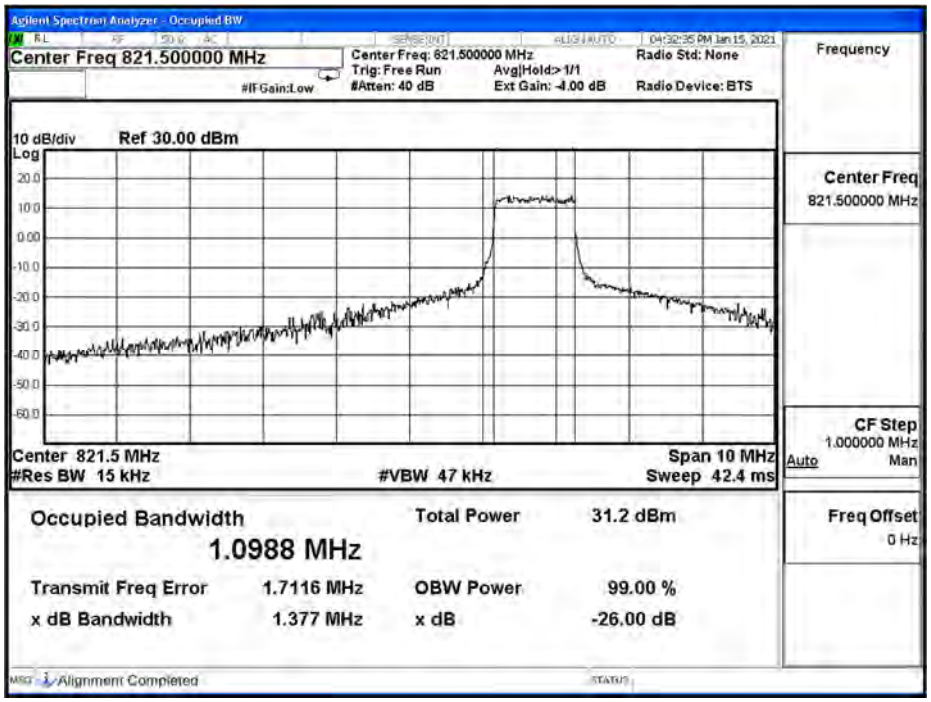
CAT-M1_B26_CH26740_5M__QPSK_6RB0



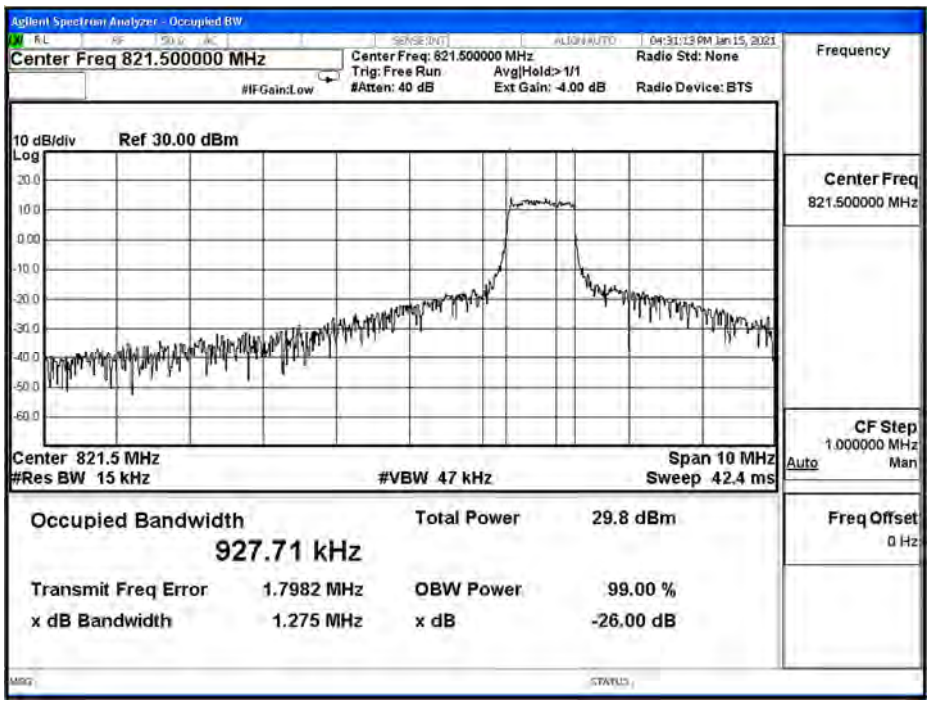
CAT-M1_B26_CH26740_5M_16-QAM_5RB1



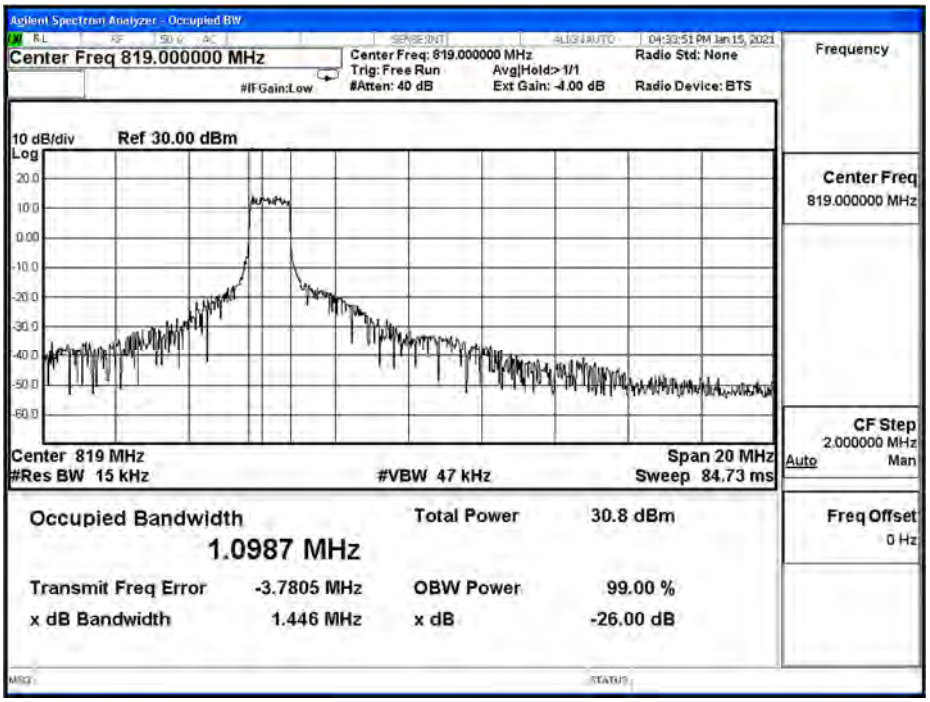
CAT-M1_B26_CH26765_5M__QPSK_6RB0



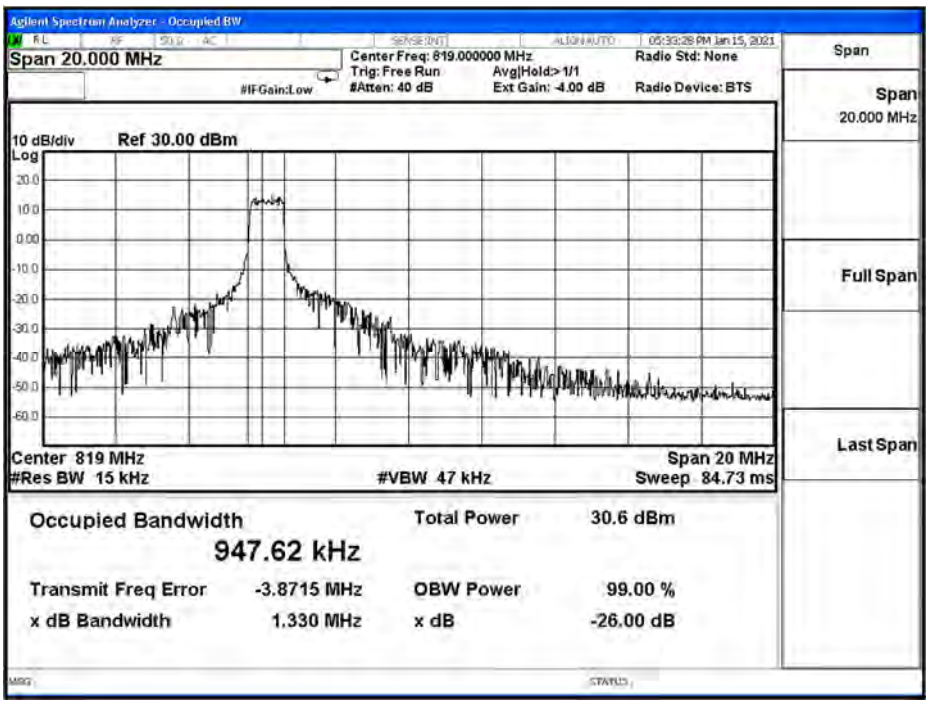
CAT-M1_B26_CH26765_5M_16-QAM_5RB1



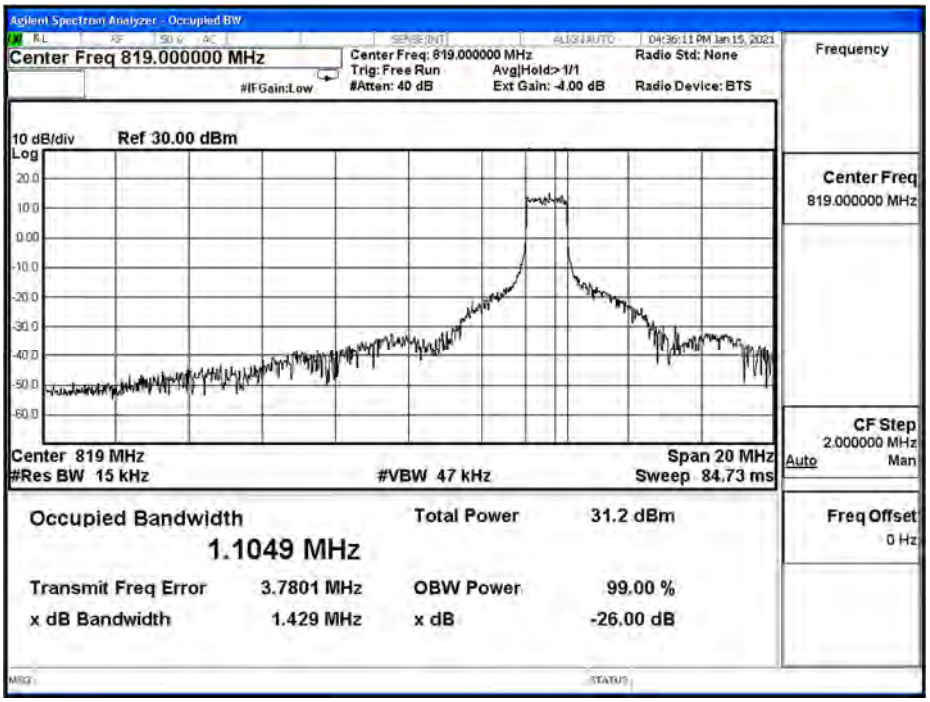
CAT-M1_B26__CH26740_10M__QPSK_6RB0__low



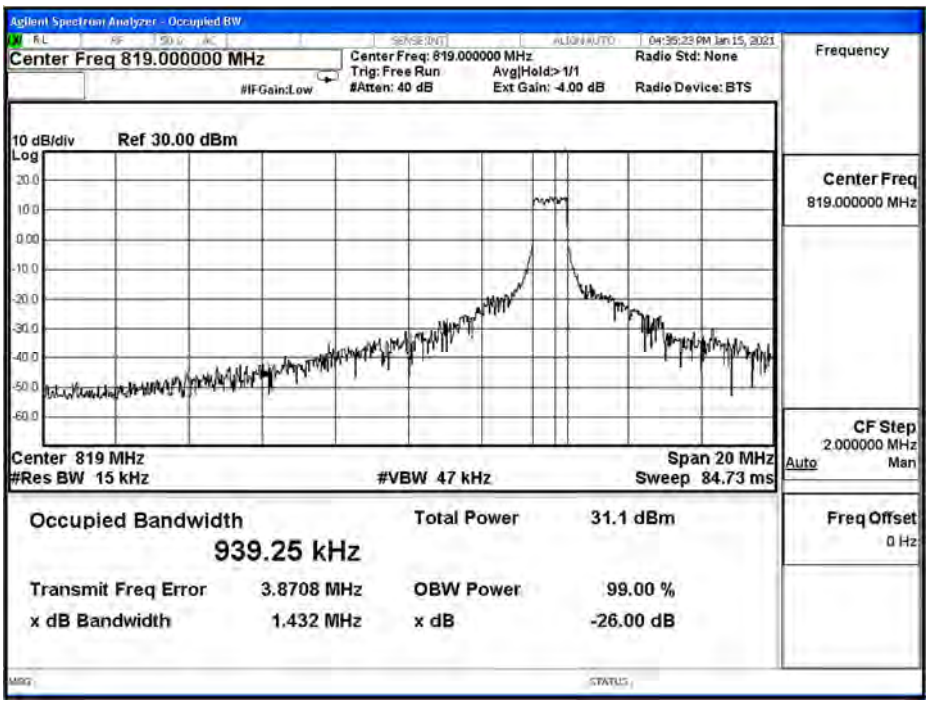
CAT-M1_B26__CH26740_10M_16-QAM_5RB0__low



CAT-M1_B26_CH26740_10M__QPSK_6RB0_high

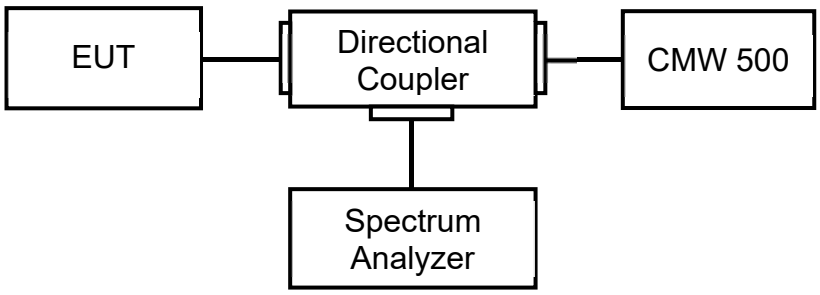


CAT-M1_B26_CH26740_10M_16-QAM_5RB1_high



5. Peak To Average Ratio

5.1. Test Setup



5.2. Test Procedure

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 %.

5.3. Test Method

KDB 971168 D01 Power Meas License Digital Systems v03 sub-clause 5.7.2
ANSI C63.26: 2015 Sub-clause 5.2.3.4

5.4. Limit

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

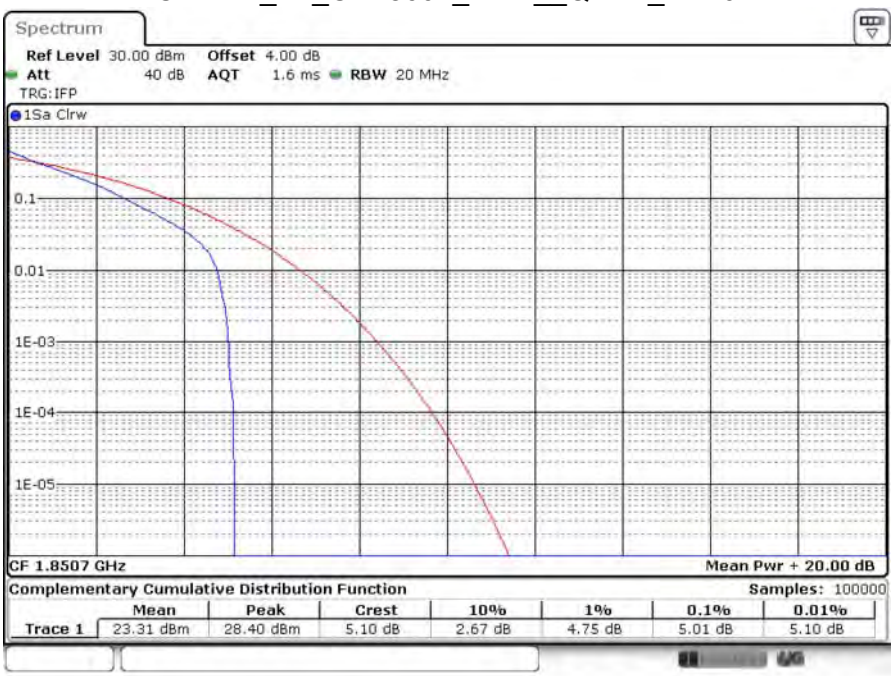
5.5. Test Result

Product	Connectivity Module		
Test Item	Peak To Average Ratio		
Test Mode	Mode 1: Band2 Link		
Date of Test	2021/01/19	Test Site	SR12-H
Temperature (°C)	24	Humidity (%RH)	59

BW	Ch	Freq. (MHz)	Modulation	Peak (dBm)	Average (dBm)	PAPR (dB)
1.4M	18607	1850.7	QPSK	28.40	23.31	5.01
			16-QAM	28.38	22.33	5.97
	18900	1880	QPSK	28.49	23.11	5.30
			16-QAM	28.29	21.64	6.55
	19193	1909.3	QPSK	28.67	23.15	5.42
			16-QAM	28.57	22.07	6.35
3M	18615	1851.5	QPSK	28.31	23.35	4.90
			16-QAM	28.25	22.03	6.17
	18900	1880	QPSK	28.38	21.51	6.81
			16-QAM	28.32	22.08	6.06
	19185	1908.5	QPSK	28.50	23.11	5.30
			16-QAM	28.42	22.26	6.12
5M	18625	1852.5	QPSK	28.08	23.05	4.99
			16-QAM	28.75	23.03	5.42
	18900	1880	QPSK	28.31	23.01	5.16
			16-QAM	28.78	23.02	5.68
	19175	1907.5	QPSK	28.27	22.88	5.30
			16-QAM	28.83	23.05	5.74
10M	18650	1855	QPSK	27.77	22.79	4.96
			16-QAM	28.96	23.04	5.39
	18900	1880	QPSK	27.95	22.74	5.13
			16-QAM	28.48	22.68	5.74
	19150	1905	QPSK	28.02	22.63	5.30
			16-QAM	28.42	22.38	5.94

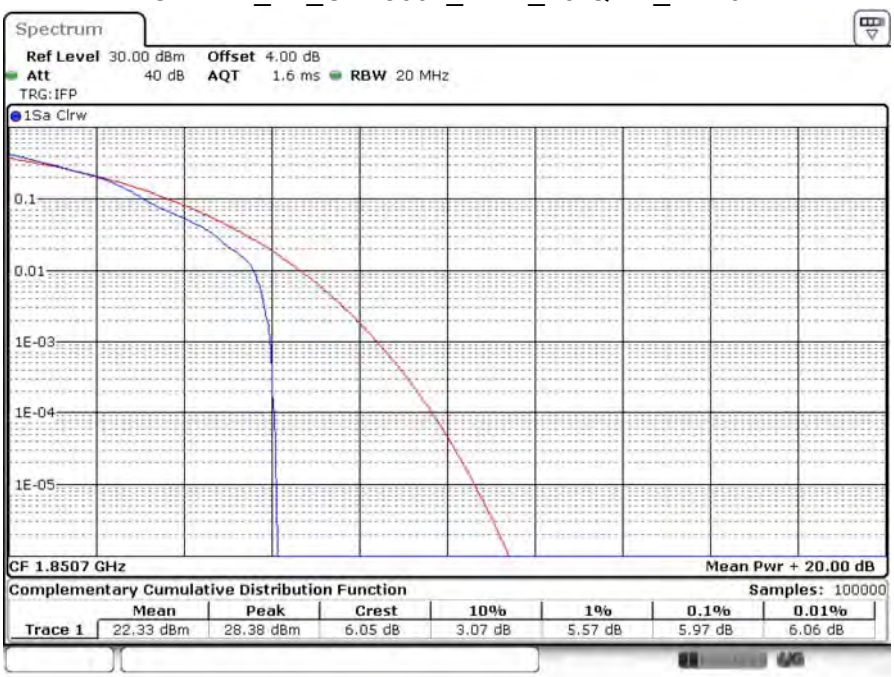
BW	Ch	Freq. (MHz)	Modulation	Peak (dBm)	Average (dBm)	PAPR (dB)
15M	18675	1857.5	QPSK	26.90	21.97	4.90
			16-QAM	27.44	21.81	5.57
	18900	1880	QPSK	27.35	22.29	4.99
			16-QAM	27.60	21.76	5.77
	19125	1902.5	QPSK	27.32	20.89	6.38
			16-QAM	28.08	22.19	5.83
20M	18700	1860	QPSK	26.08	21.13	4.87
			16-QAM	26.50	21.08	5.36
	18900	1880	QPSK	26.13	20.95	5.10
			16-QAM	27.09	20.92	5.59
	19100	1900	QPSK	26.81	21.59	5.16
			16-QAM	27.02	20.91	6.00

CAT-M1_B2_CH18607_1.4M__QPSK_1RB0



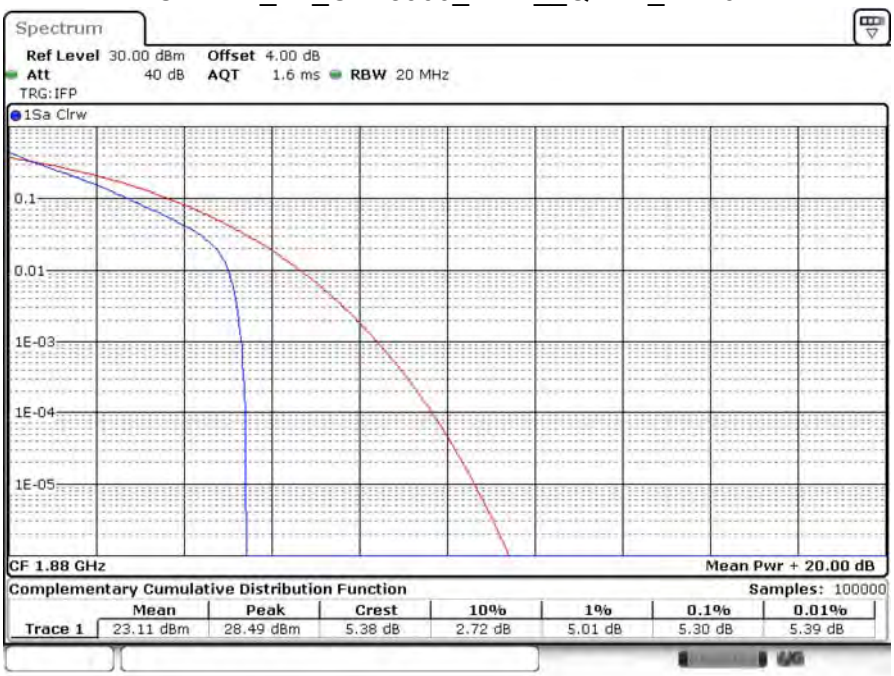
Date: 18.JAN.2021 10:03:09

CAT-M1_B2_CH18607_1.4M_16-QAM_1RB0



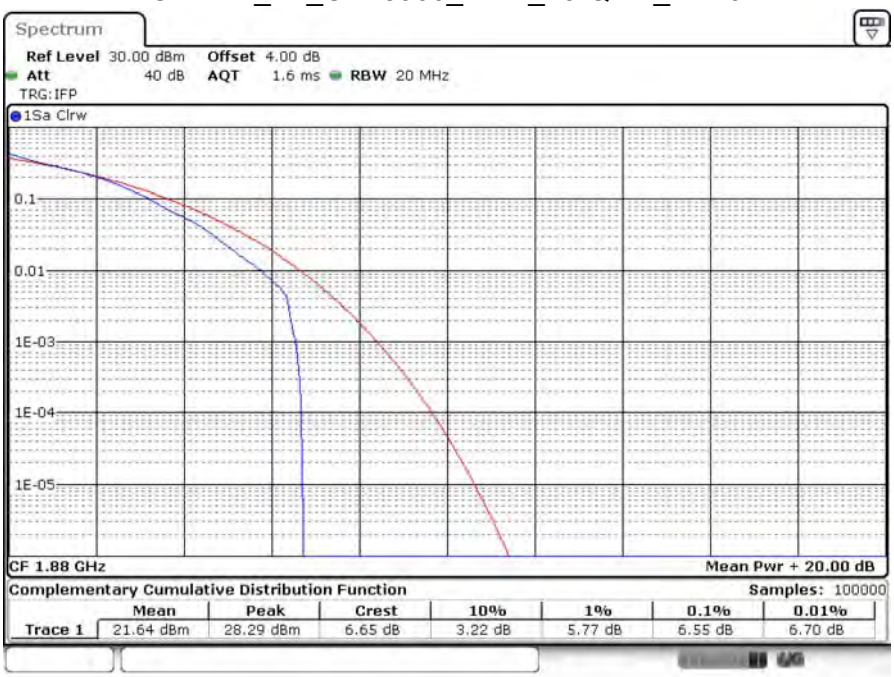
Date: 18.JAN.2021 10:08:19

CAT-M1_B2_CH18900_1.4M__QPSK_1RB0



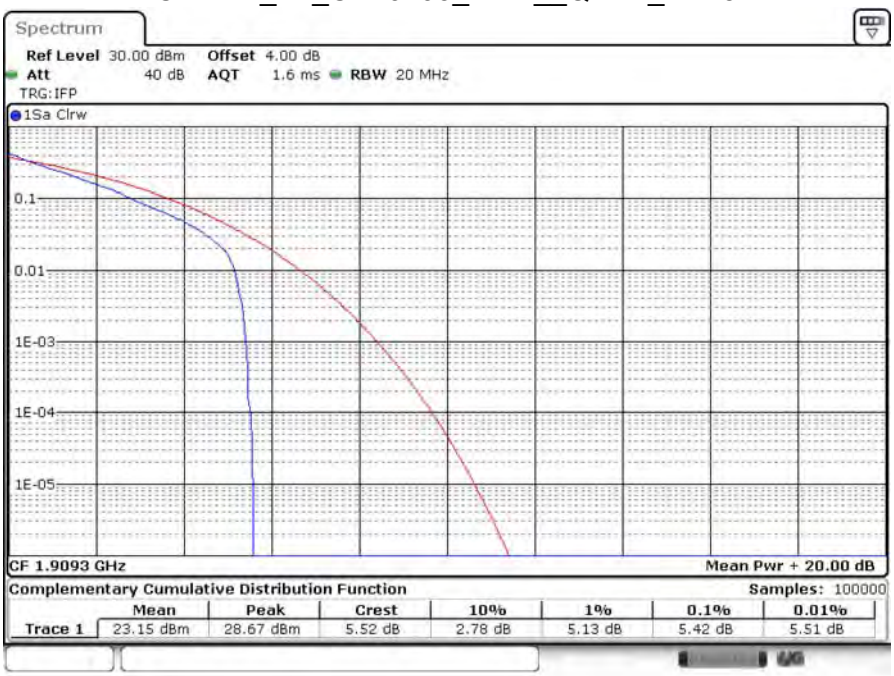
Date: 18.JAN.2021 10:19:32

CAT-M1_B2_CH18900_1.4M_16-QAM_1RB0



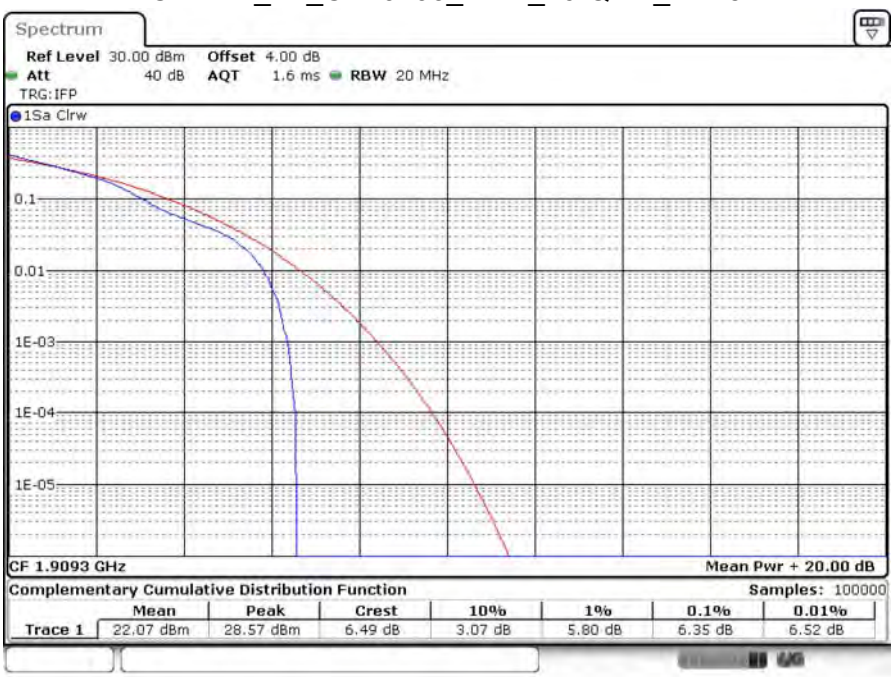
Date: 18.JAN.2021 10:12:05

CAT-M1_B2_CH19193_1.4M__QPSK_1RB5



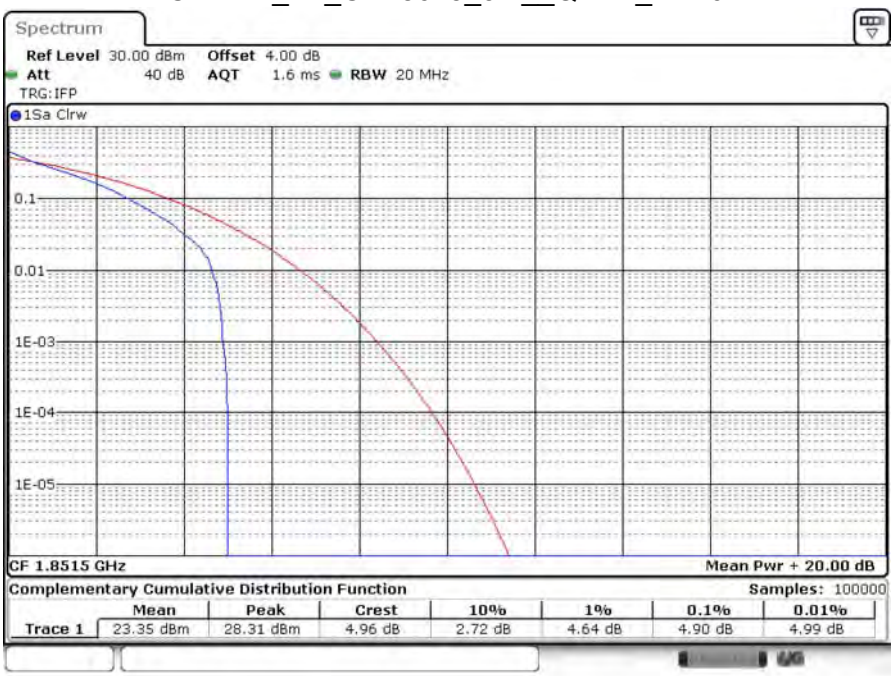
Date: 18.JAN.2021 10:20:56

CAT-M1_B2_CH19193_1.4M_16-QAM_1RB5



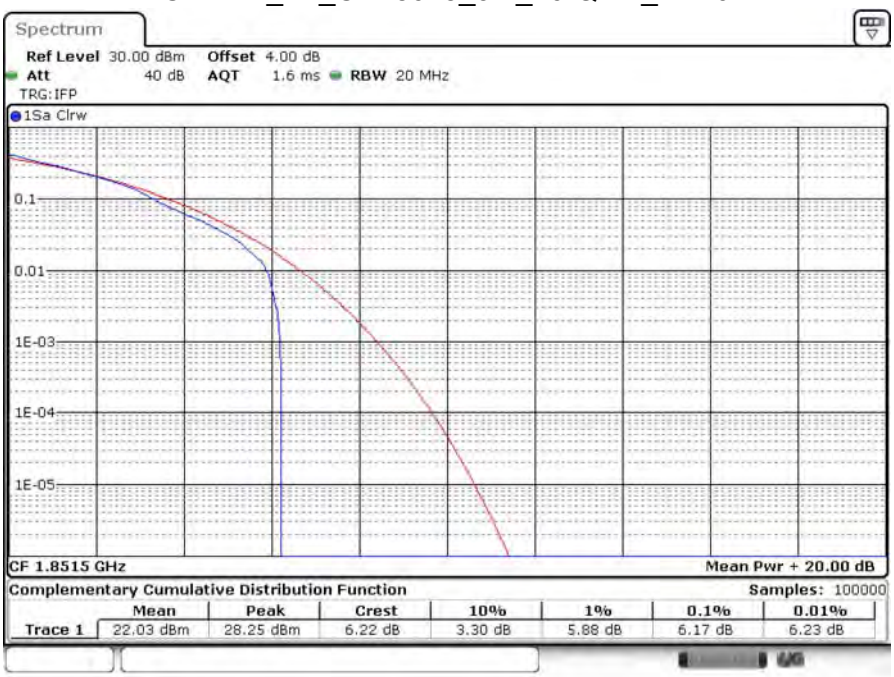
Date: 18.JAN.2021 10:32:29

CAT-M1_B2_CH18615_3M__QPSK_1RB0



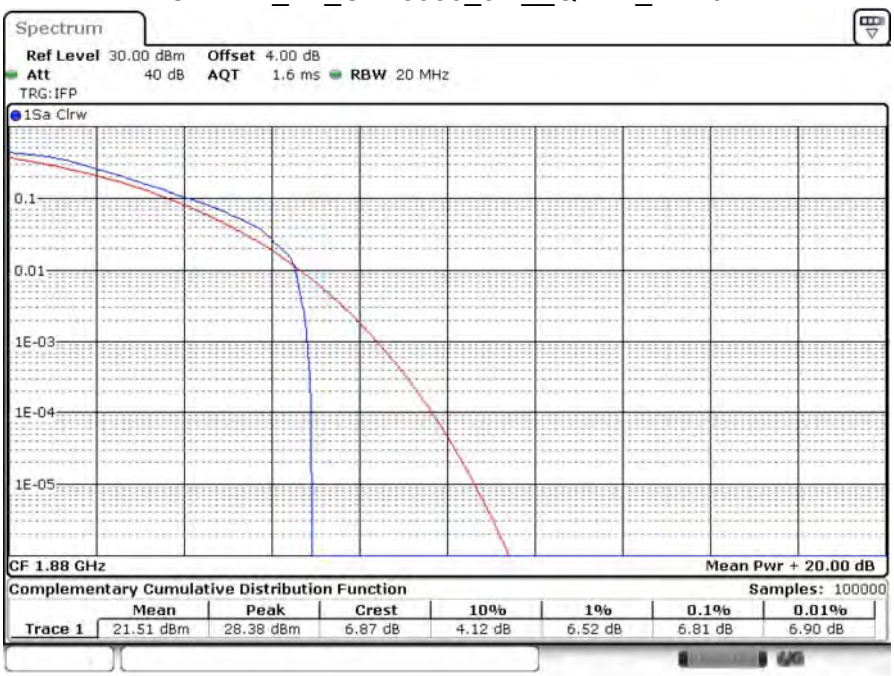
Date: 18.JAN.2021 10:40:20

CAT-M1_B2_CH18615_3M_16-QAM_1RB0



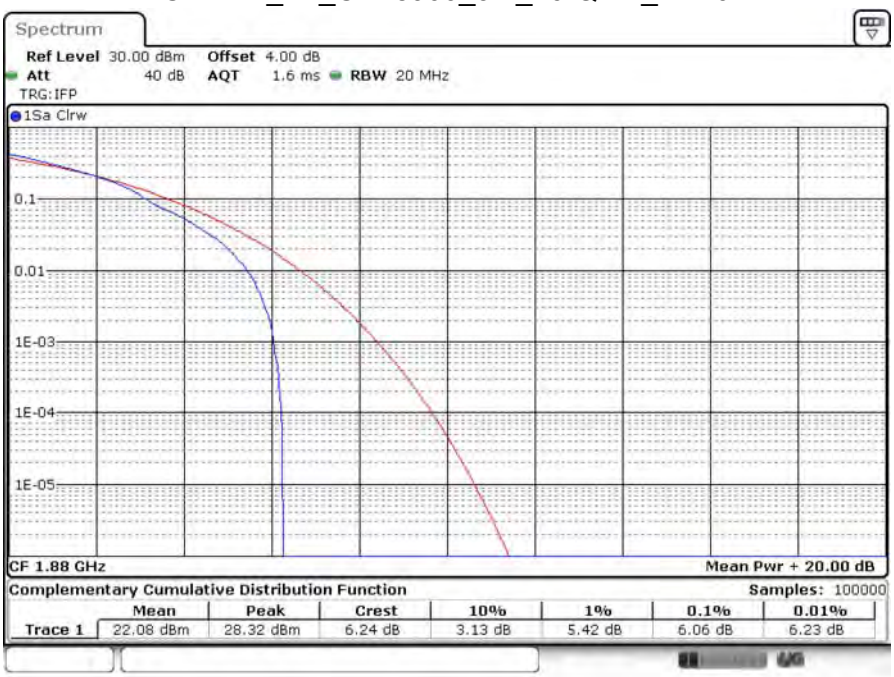
Date: 18.JAN.2021 10:39:28

CAT-M1_B2_CH18900_3M__QPSK_1RB0



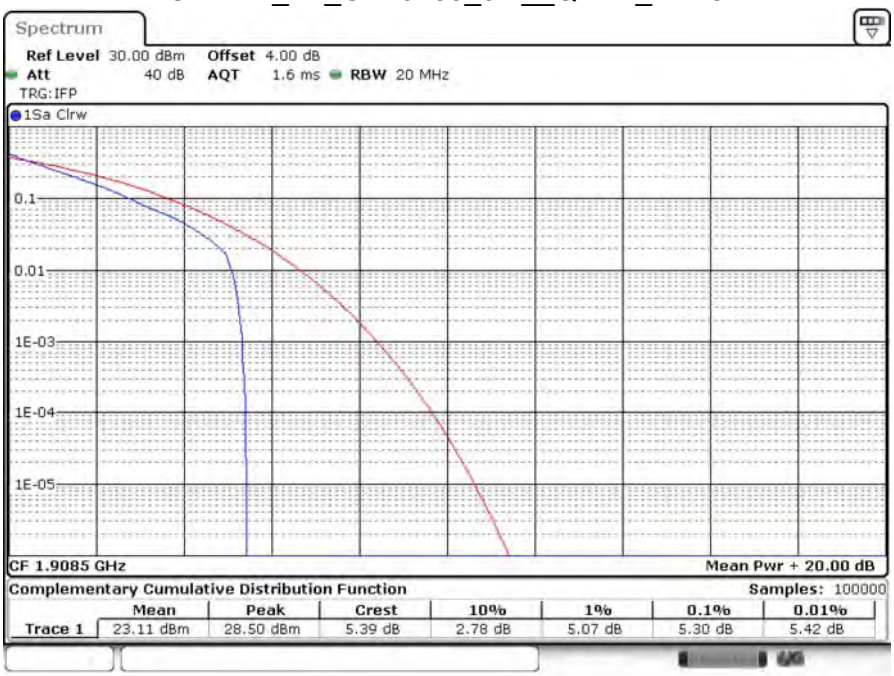
Date: 18.JAN.2021 10:42:36

CAT-M1_B2_CH18900_3M_16-QAM_1RB0



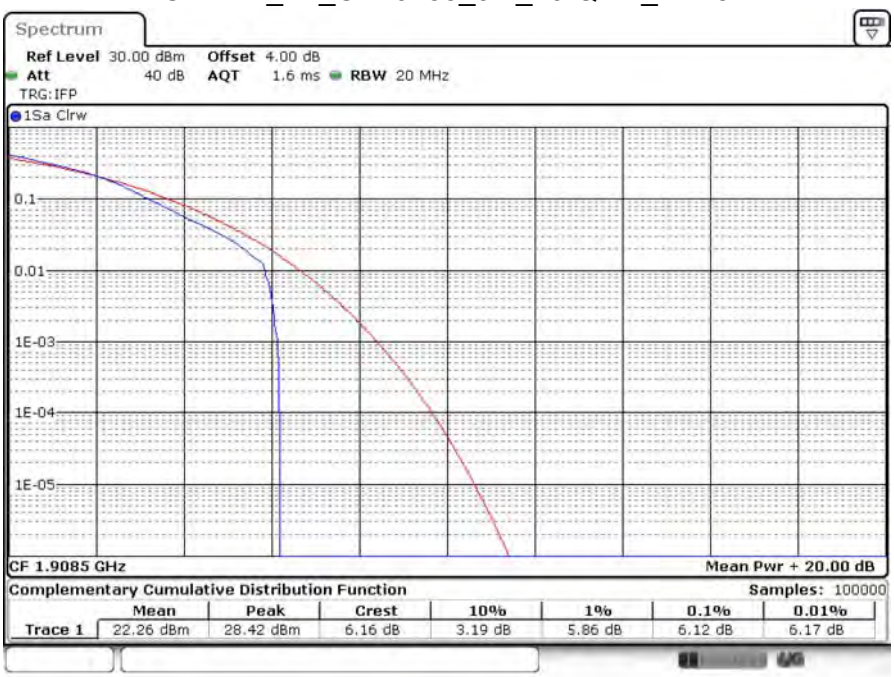
Date: 18.JAN.2021 10:44:56

CAT-M1_B2_CH19185_3M__QPSK_1RB5



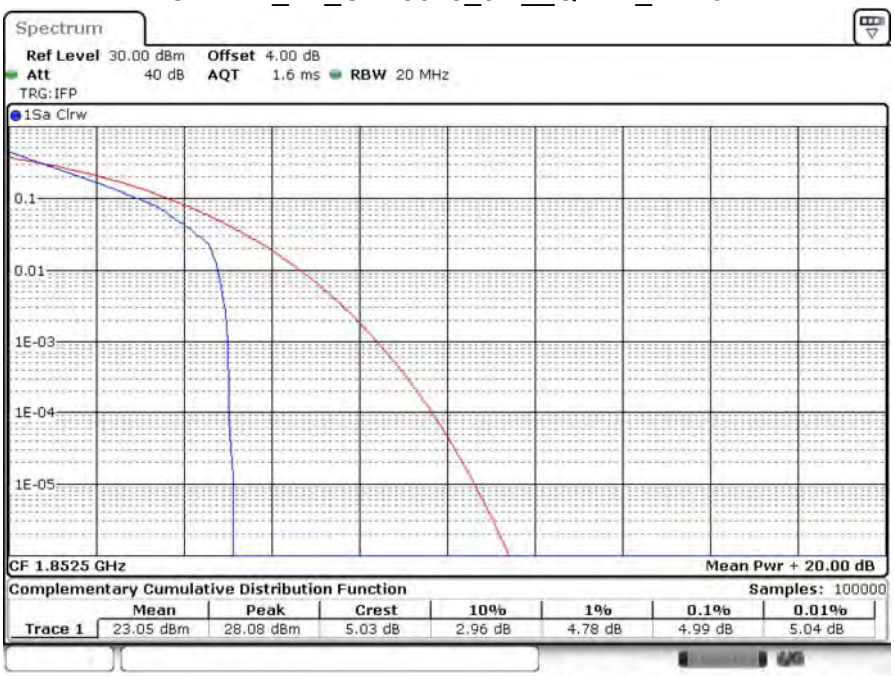
Date: 18.JAN.2021 10:47:16

CAT-M1_B2_CH19185_3M_16-QAM_1RB5



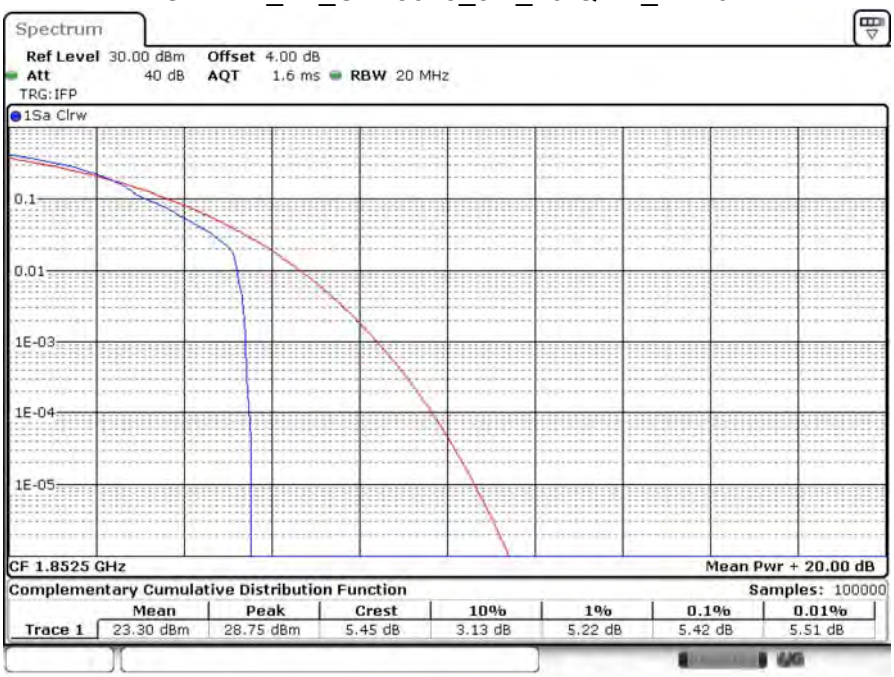
Date: 18.JAN.2021 10:46:42

CAT-M1_B2_CH18625_5M__QPSK_1RB0



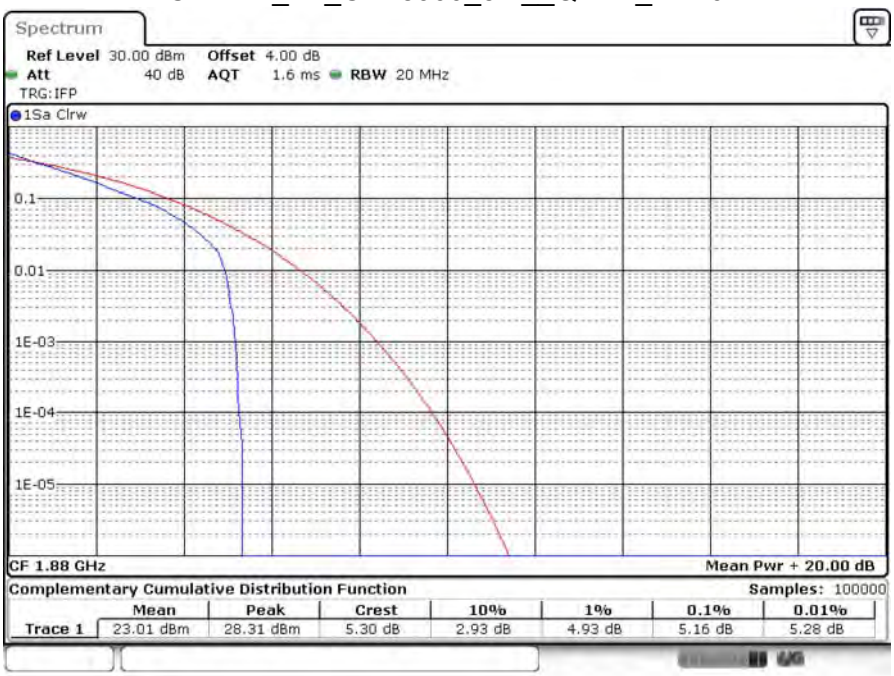
Date: 18.JAN.2021 10:52:39

CAT-M1_B2_CH18625_5M_16-QAM_1RB0



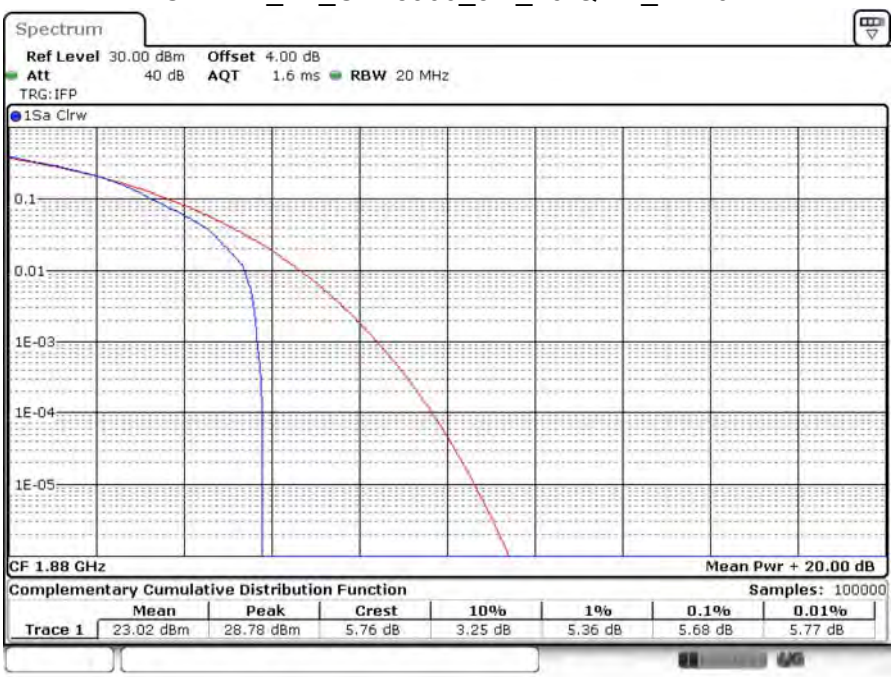
Date: 18.JAN.2021 10:52:09

CAT-M1_B2_CH18900_5M__QPSK_1RB0



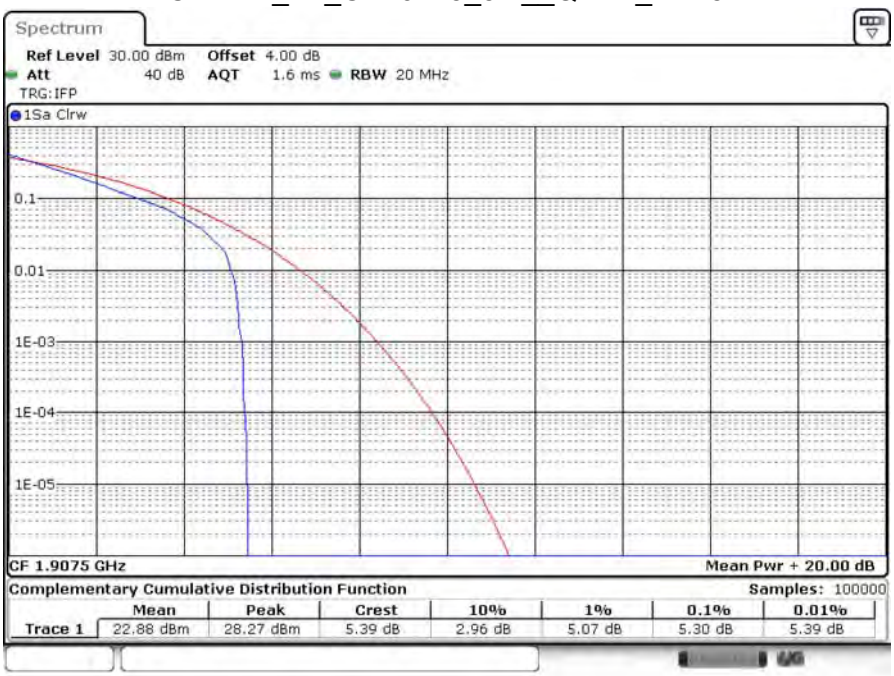
Date: 18.JAN.2021 10:53:20

CAT-M1_B2_CH18900_5M_16-QAM_1RB0



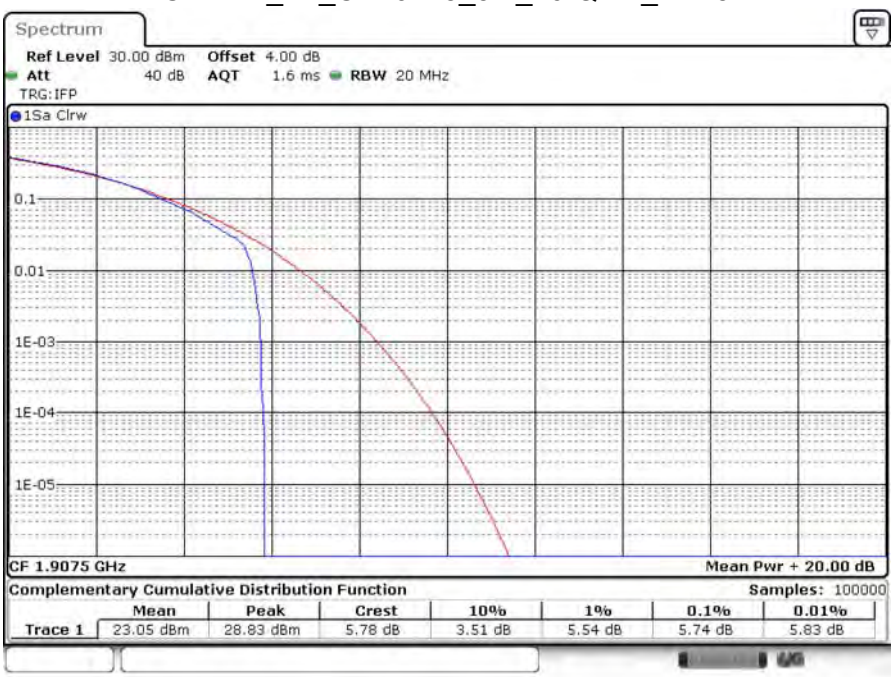
Date: 18.JAN.2021 10:53:46

CAT-M1_B2_CH19175_5M__QPSK_1RB5



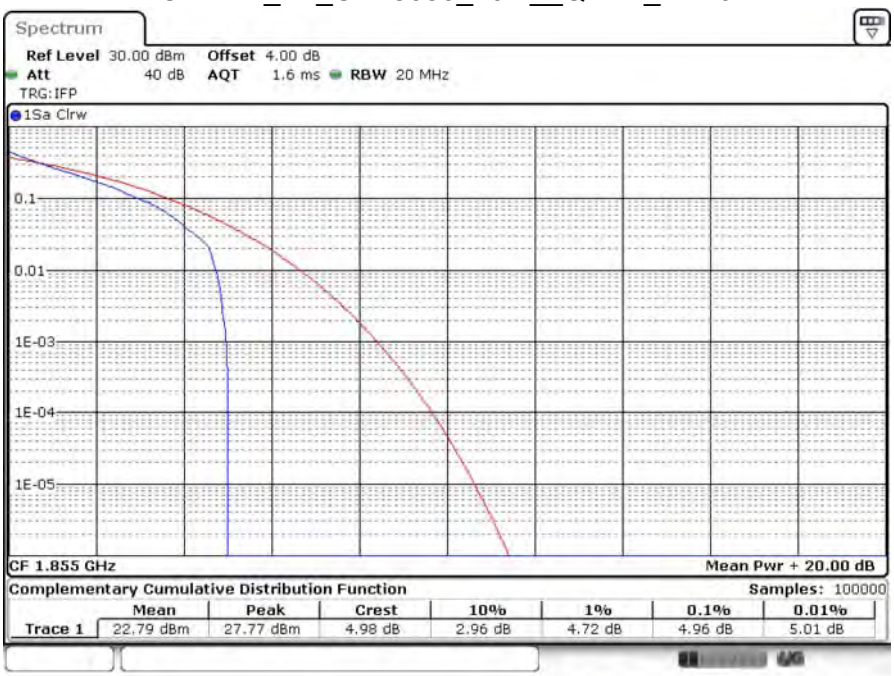
Date: 18.JAN.2021 10:55:00

CAT-M1_B2_CH19175_5M_16-QAM_1RB5



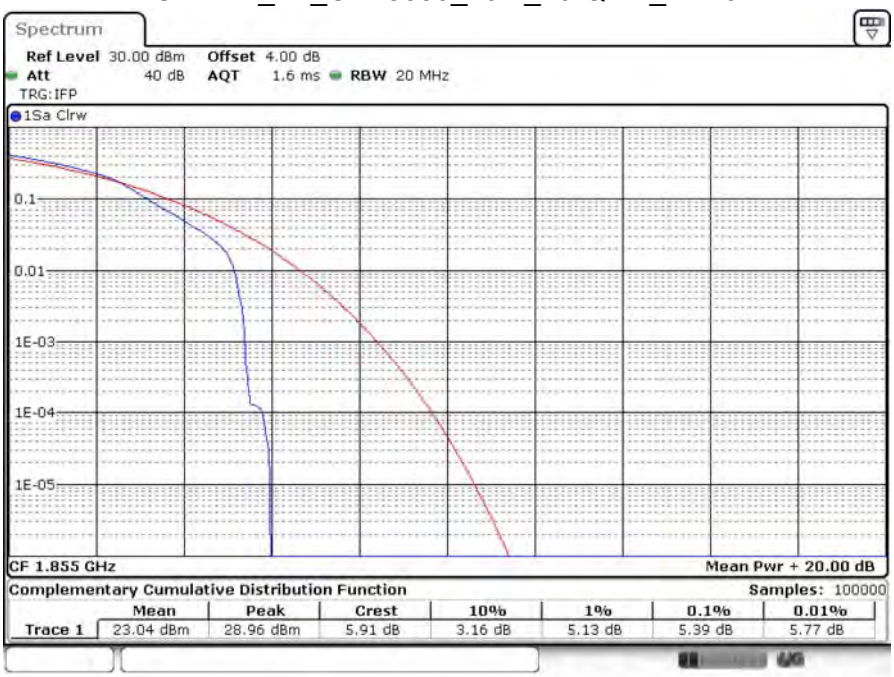
Date: 18.JAN.2021 10:54:23

CAT-M1_B2_CH18650_10M__QPSK_1RB0



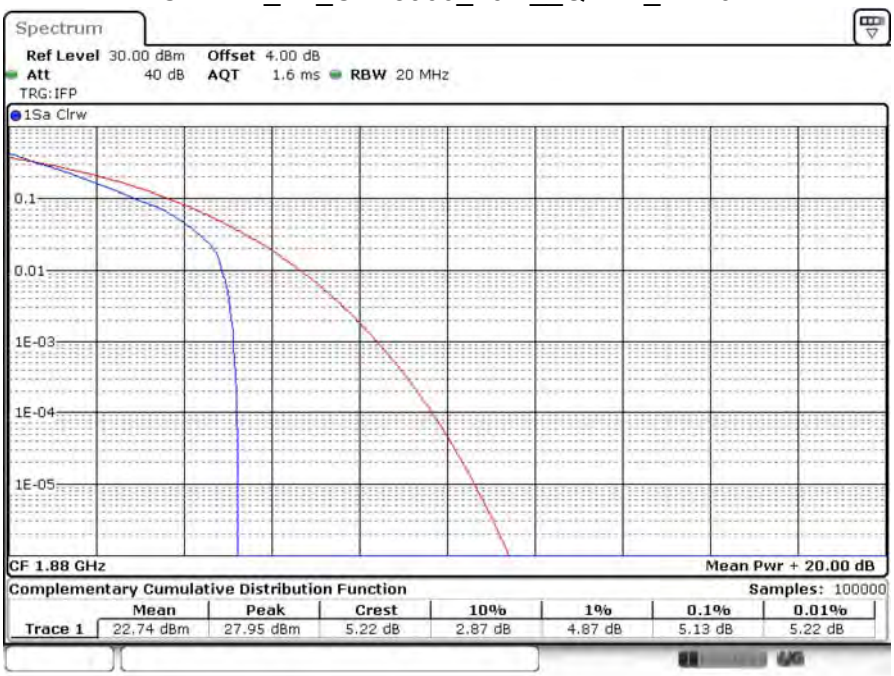
Date: 18.JAN.2021 10:57:10

CAT-M1_B2_CH18650_10M_16-QAM_1RB0



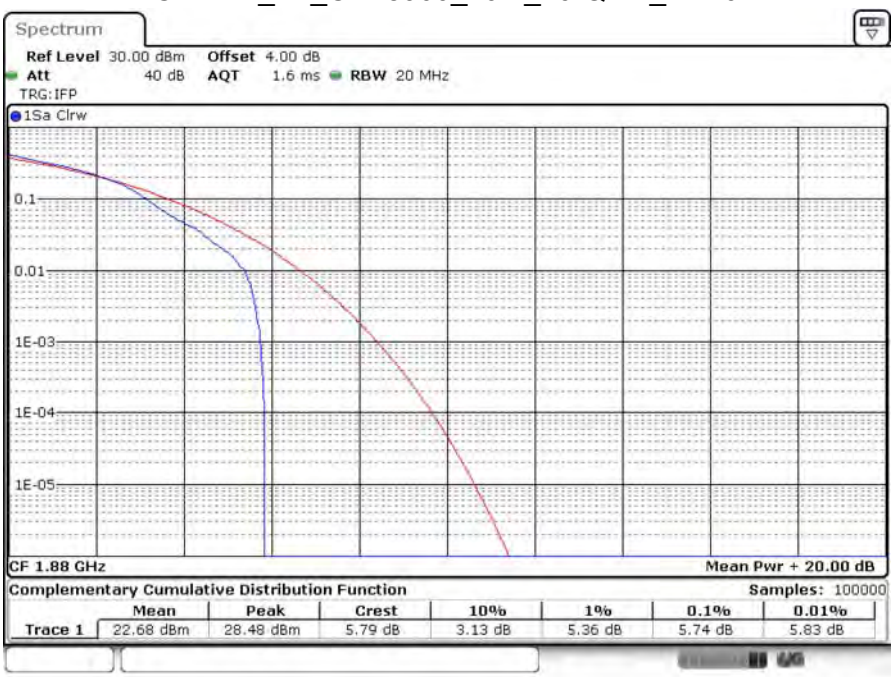
Date: 18.JAN.2021 10:57:43

CAT-M1_B2_CH18900_10M__QPSK_1RB0



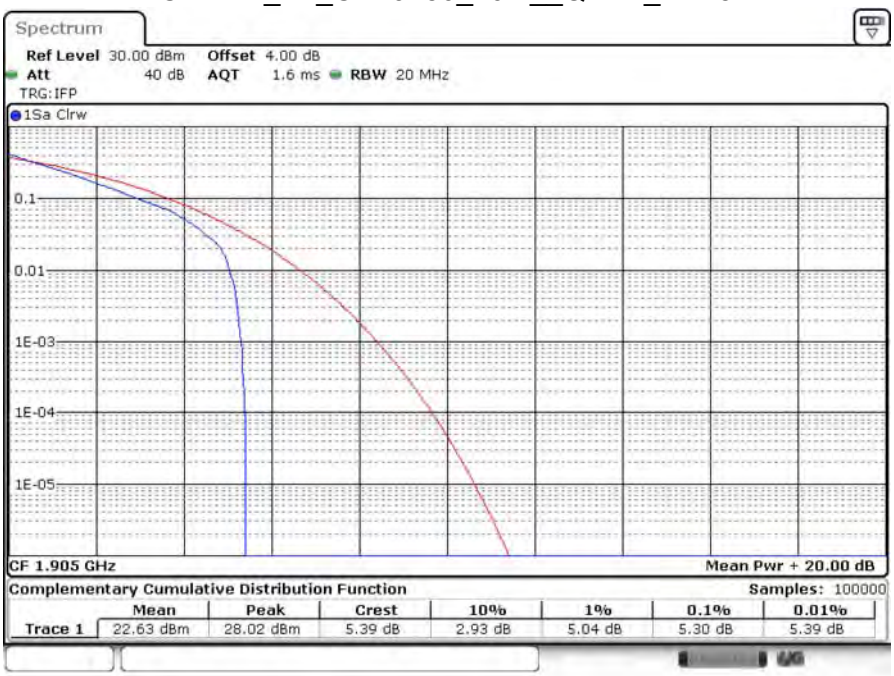
Date: 18.JAN.2021 10:58:38

CAT-M1_B2_CH18900_10M_16-QAM_1RB0



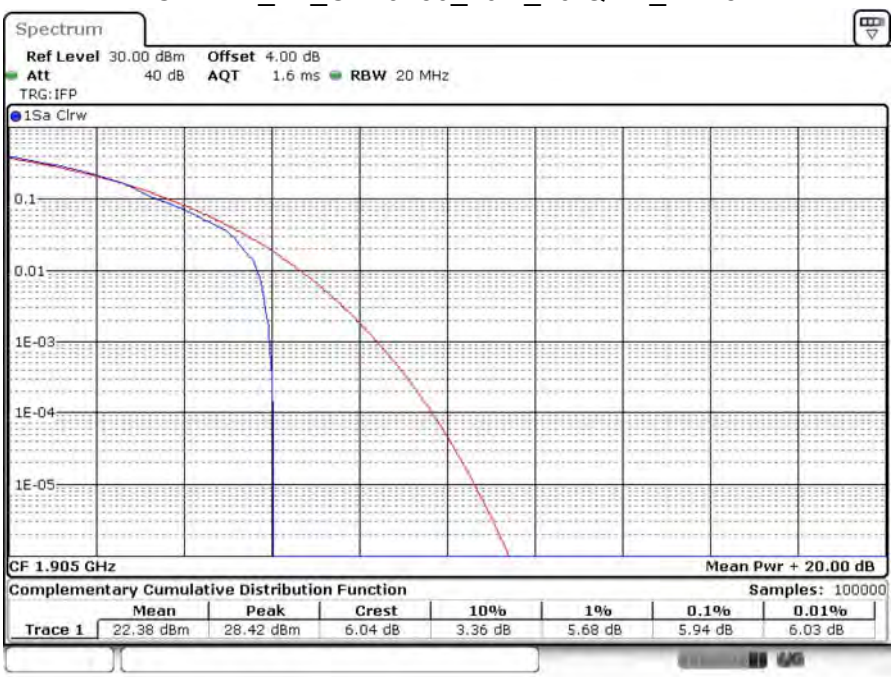
Date: 18.JAN.2021 10:58:16

CAT-M1_B2_CH19150_10M__QPSK_1RB5



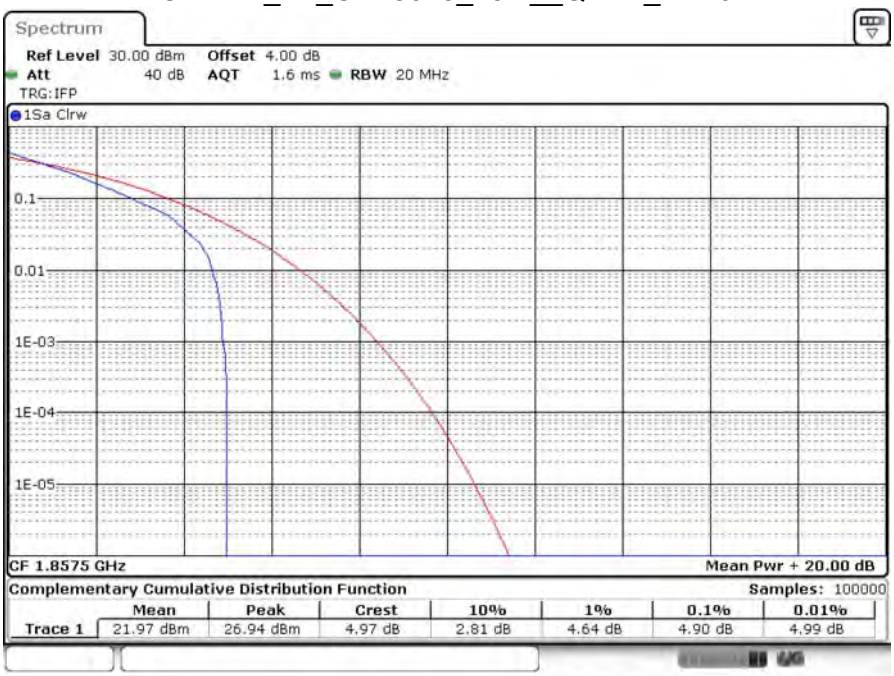
Date: 18.JAN.2021 10:59:16

CAT-M1_B2_CH19150_10M_16-QAM_1RB5



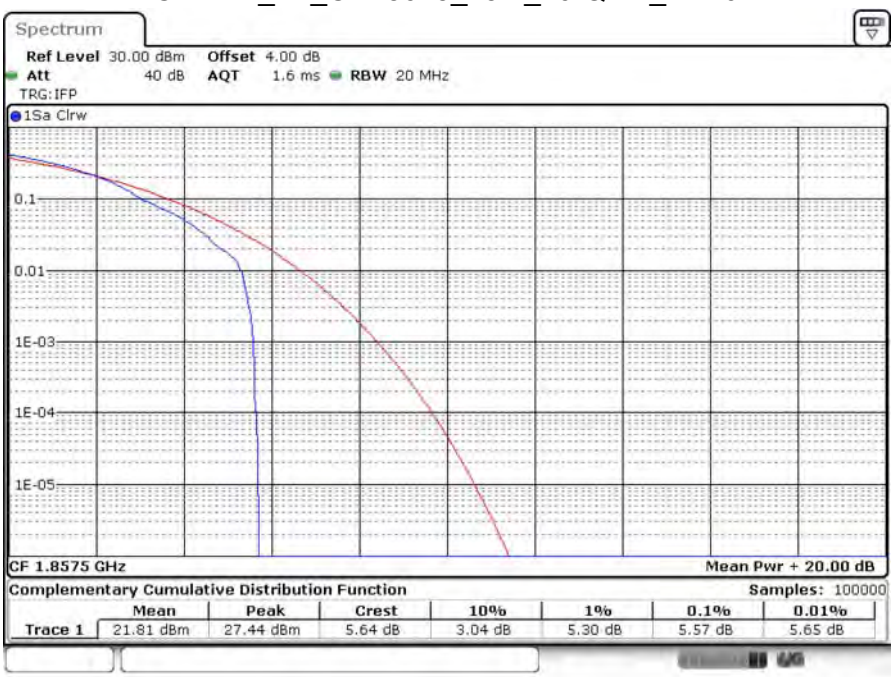
Date: 18.JAN.2021 11:01:23

CAT-M1_B2_CH18675_15M__QPSK_1RB0



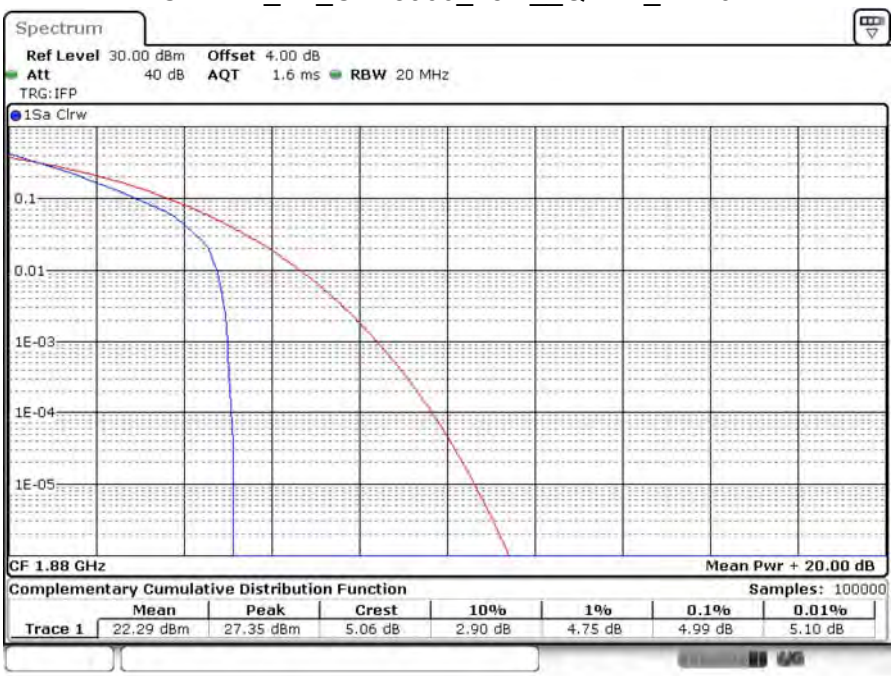
Date: 18.JAN.2021 11:04:20

CAT-M1_B2_CH18675_15M_16-QAM_1RB0



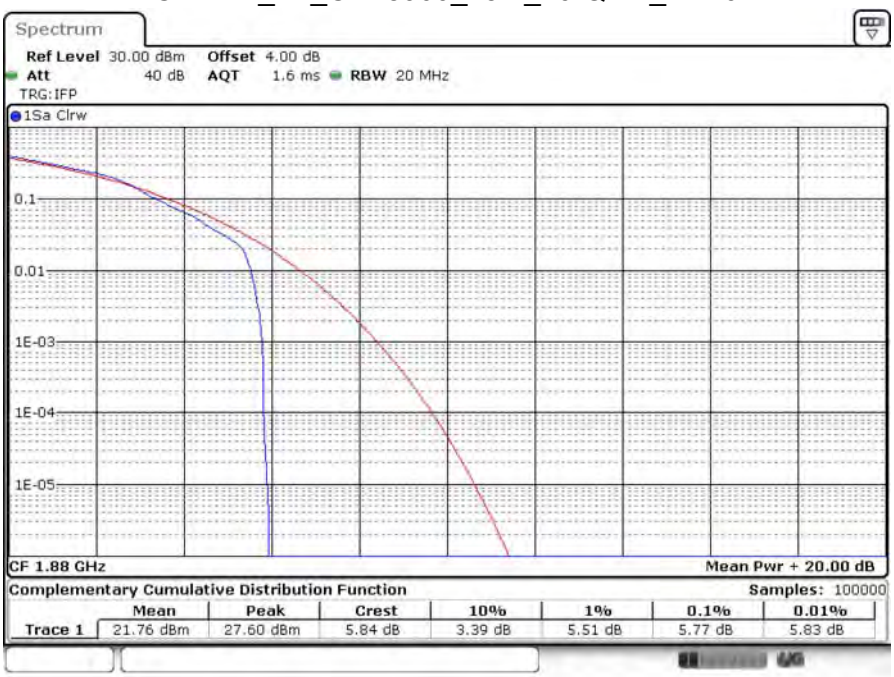
Date: 18.JAN.2021 11:03:21

CAT-M1_B2_CH18900_15M__QPSK_1RB0



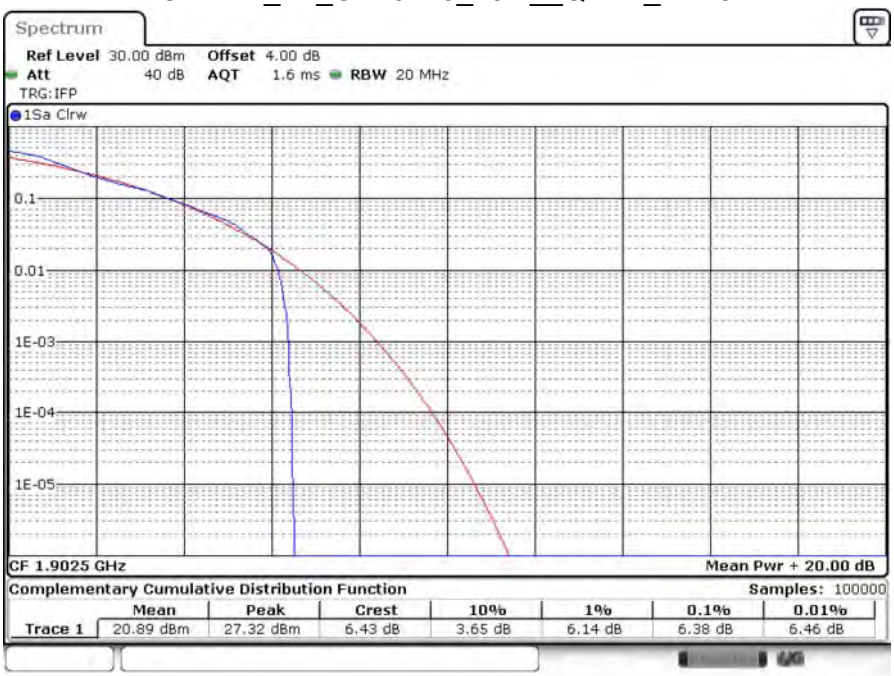
Date: 18.JAN.2021 11:05:26

CAT-M1_B2_CH18900_15M_16-QAM_1RB0



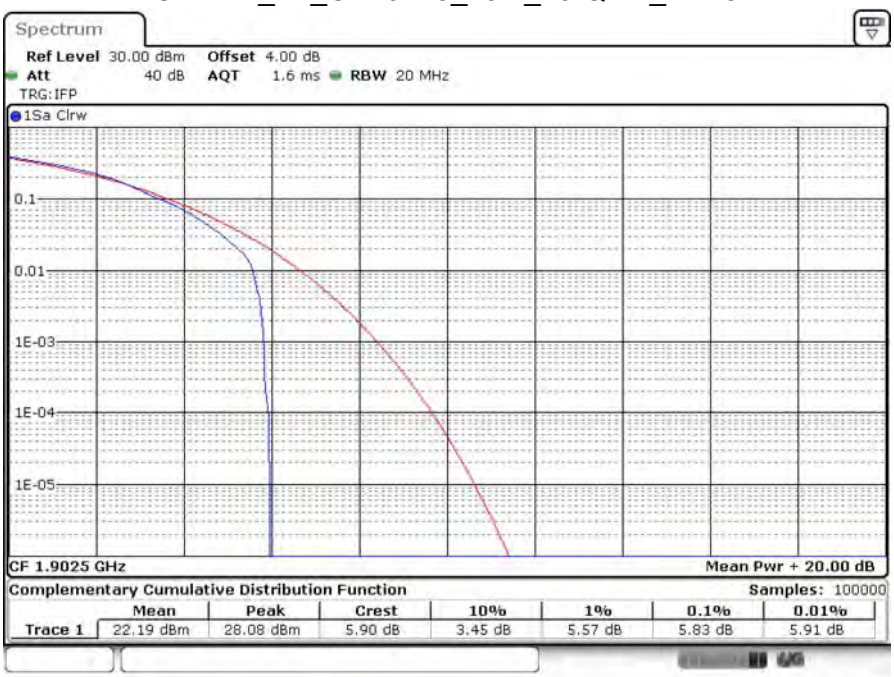
Date: 18.JAN.2021 11:06:27

CAT-M1_B2_CH19125_15M__QPSK_1RB5



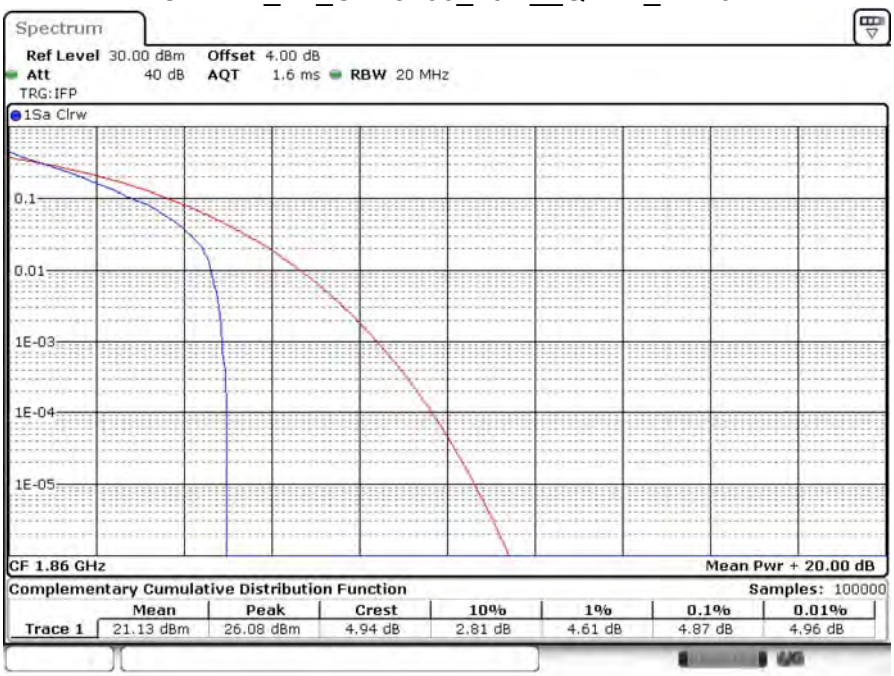
Date: 18.JAN.2021 11:08:19

CAT-M1_B2_CH19125_15M_16-QAM_1RB5



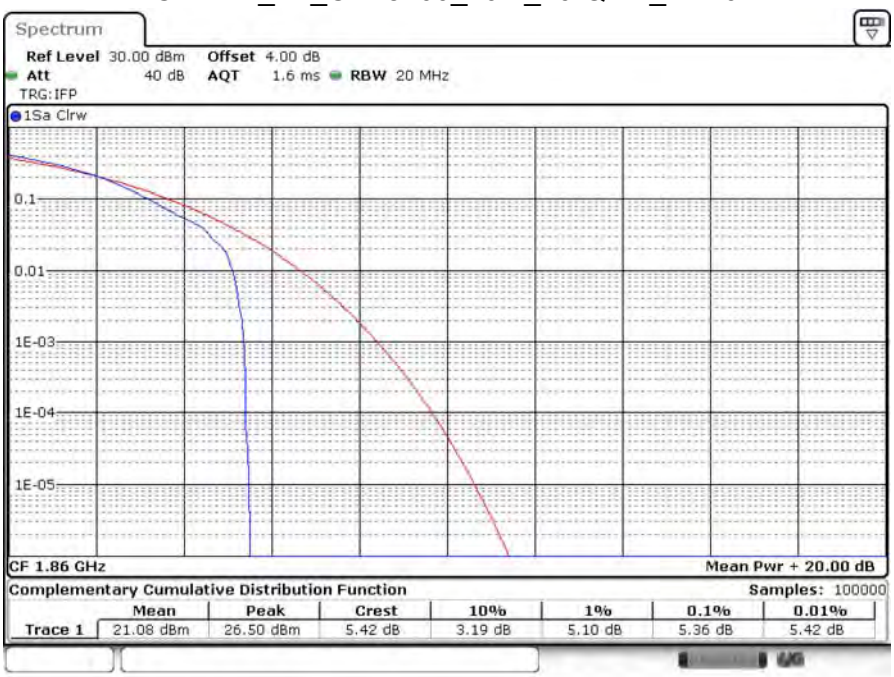
Date: 18.JAN.2021 11:07:51

CAT-M1_B2_CH18700_20M__QPSK_1RB0



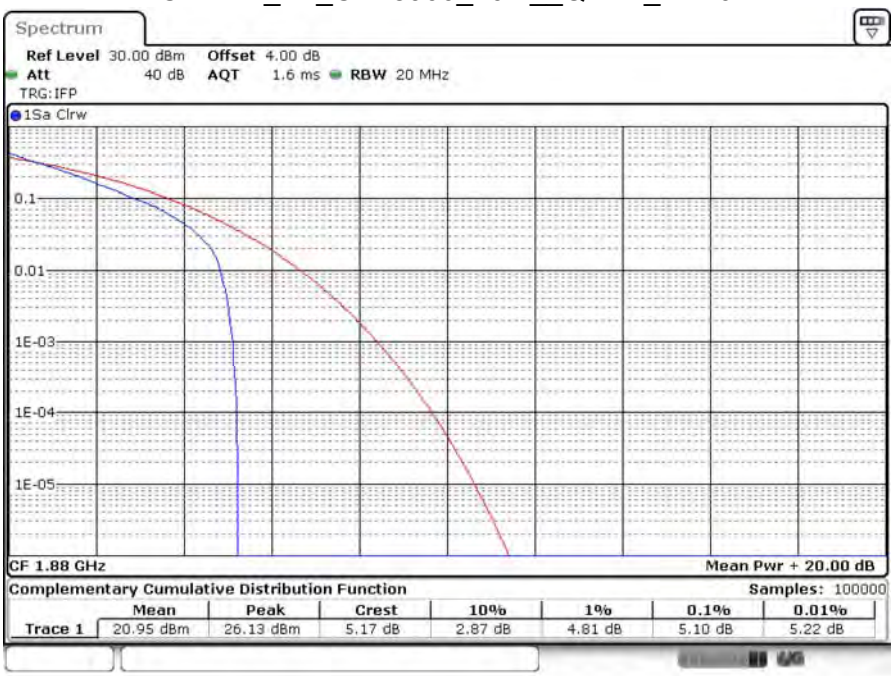
Date: 18.JAN.2021 11:10:22

CAT-M1_B2_CH18700_20M_16-QAM_1RB0



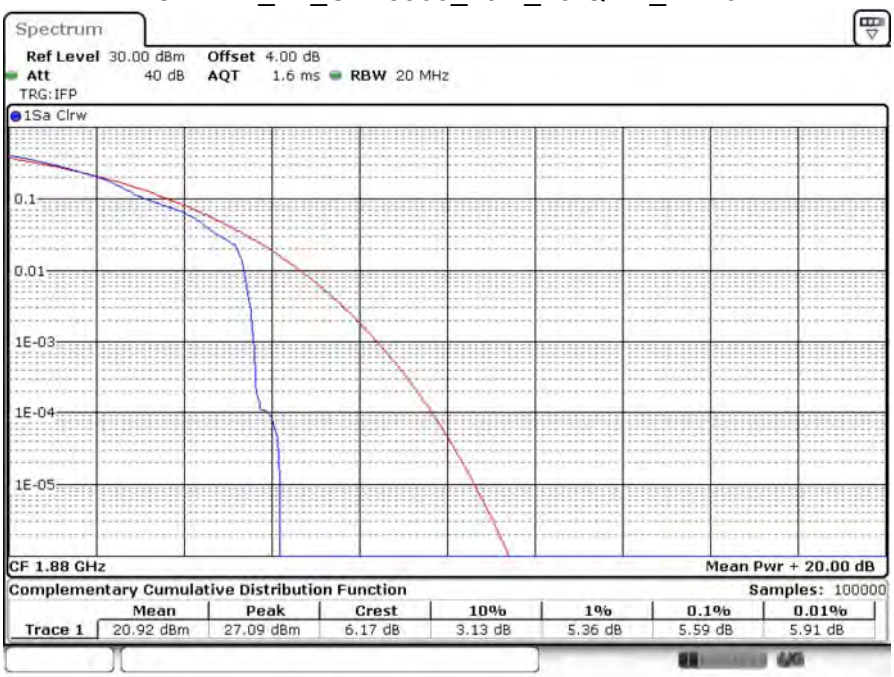
Date: 18.JAN.2021 11:11:17

CAT-M1_B2_CH18900_20M__QPSK_1RB0



Date: 18.JAN.2021 11:13:18

CAT-M1_B2_CH18900_20M_16-QAM_1RB0



Date: 18.JAN.2021 11:12:01