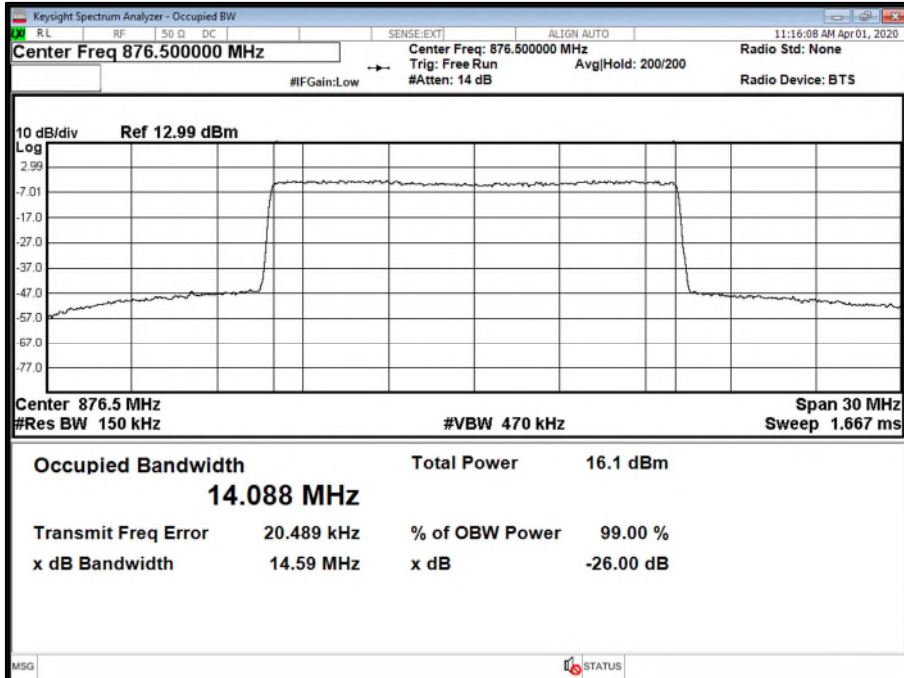


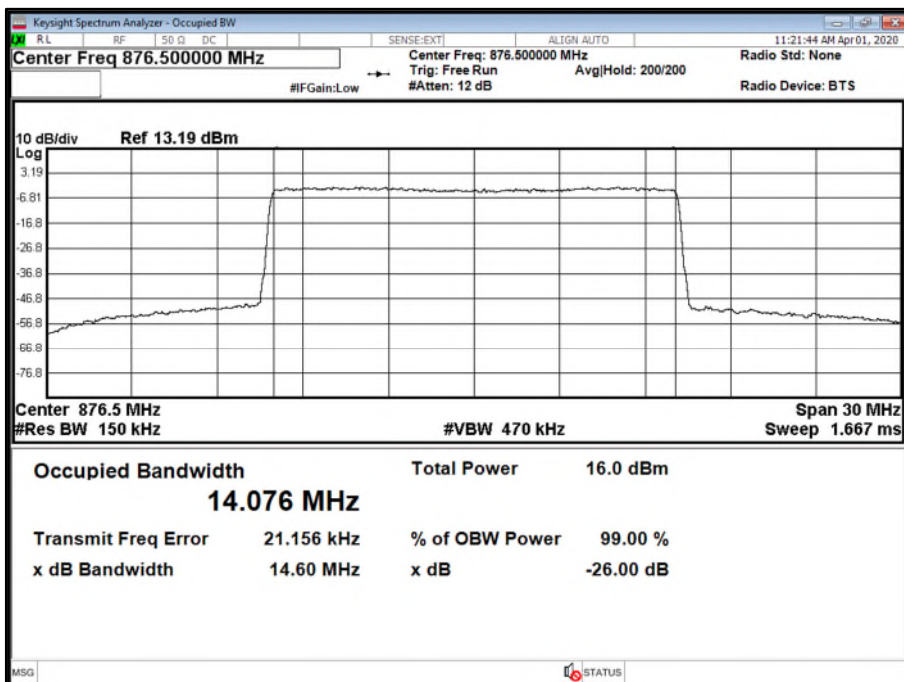


Product Service

Antenna A - NR Modulation QPSK - NR Carrier Bandwidth 15.0 MHz 15 kHz SCS - Channel Position B



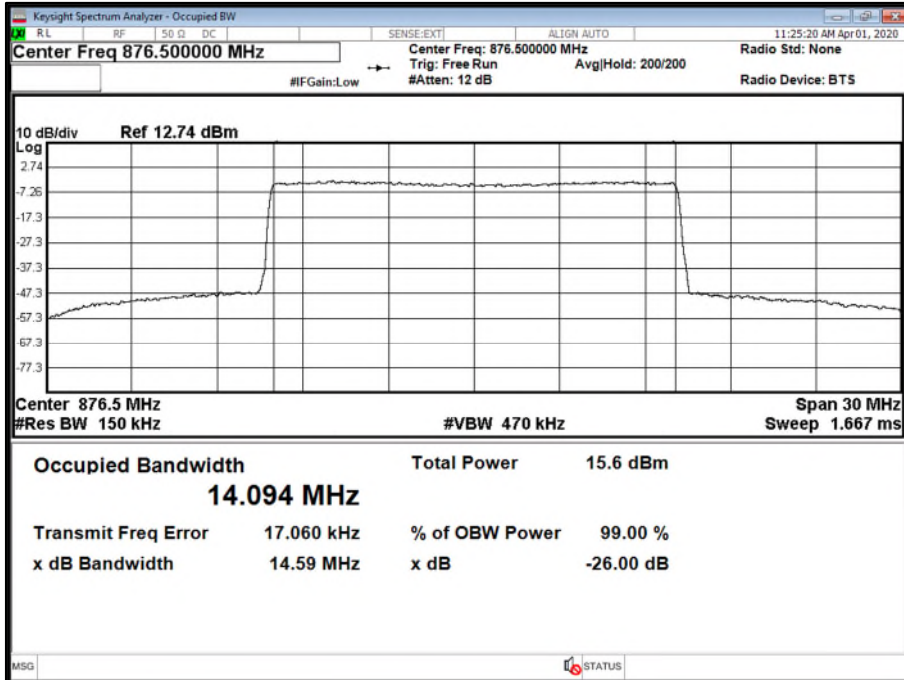
Antenna B - NR Modulation QPSK - NR Carrier Bandwidth 15.0 MHz 15 kHz SCS - Channel Position B



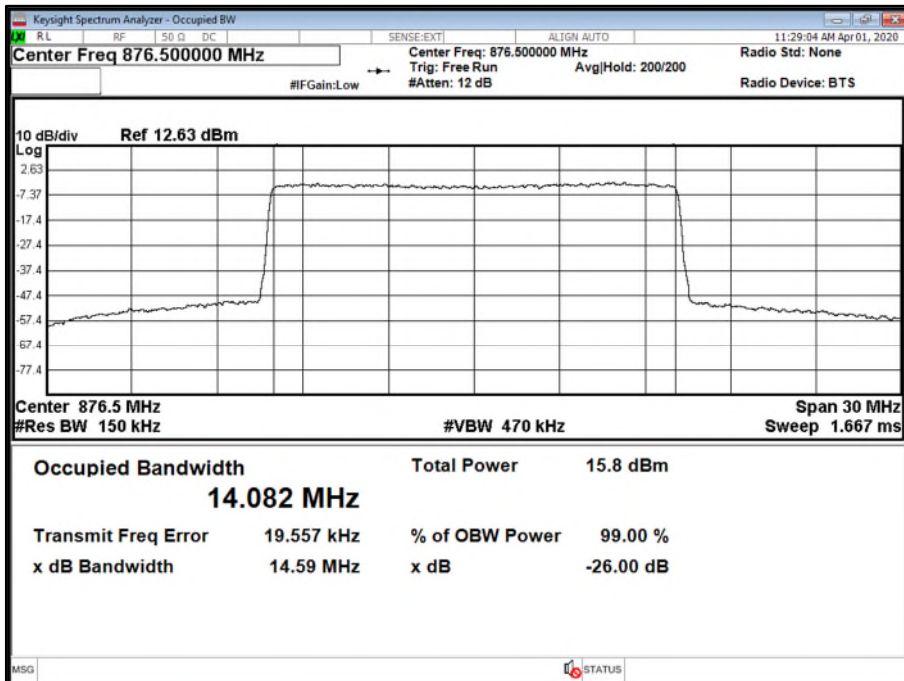


Product Service

Antenna C - NR Modulation QPSK - NR Carrier Bandwidth 15.0 MHz 15 kHz SCS - Channel Position B



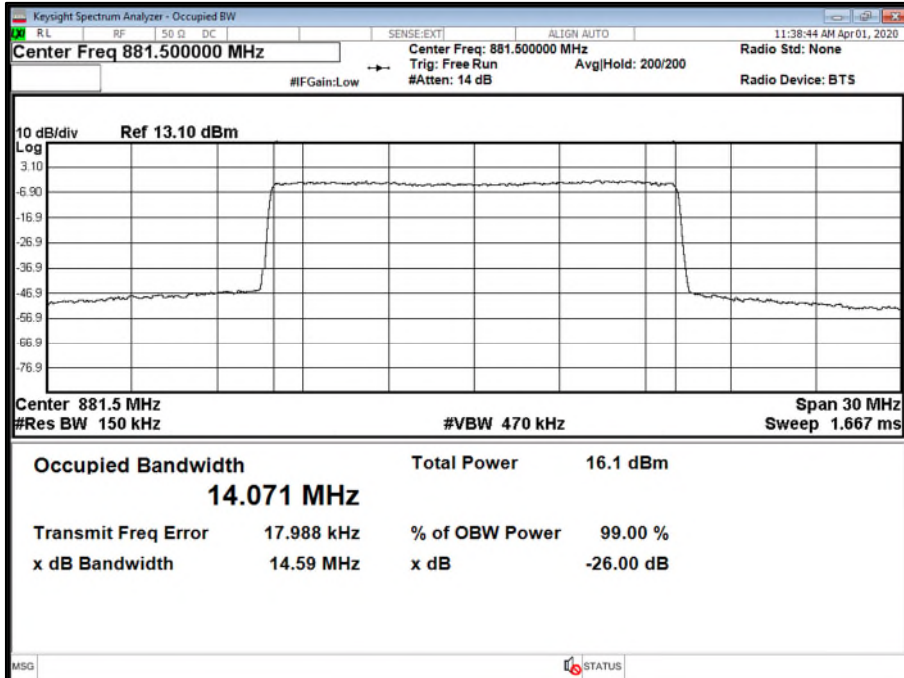
Antenna D - NR Modulation QPSK - NR Carrier Bandwidth 15.0 MHz 15 kHz SCS - Channel Position B



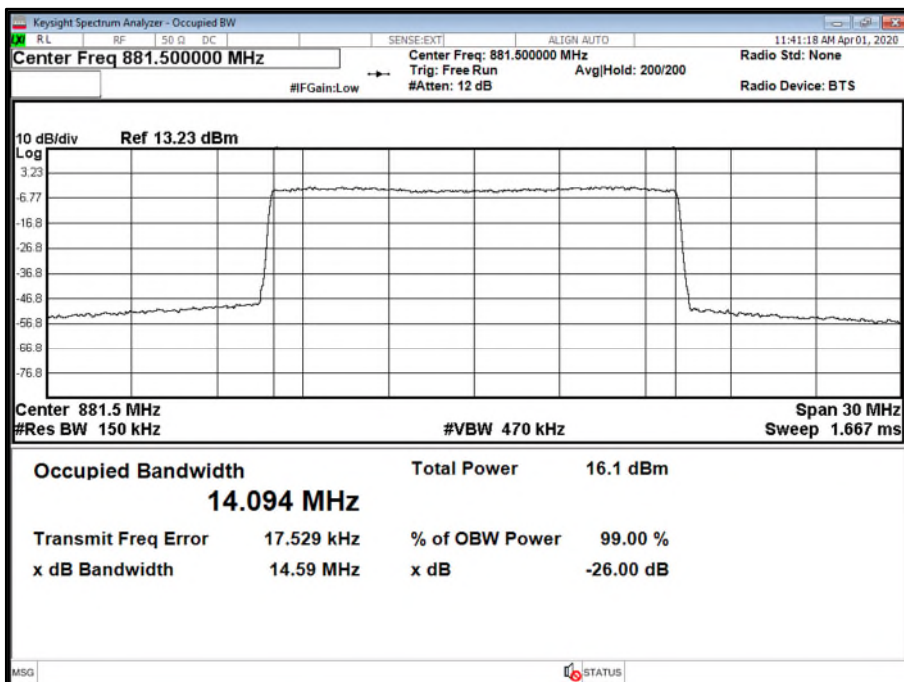


Product Service

Antenna A - NR Modulation QPSK - NR Carrier Bandwidth 15.0 MHz 15 kHz SCS - Channel Position M



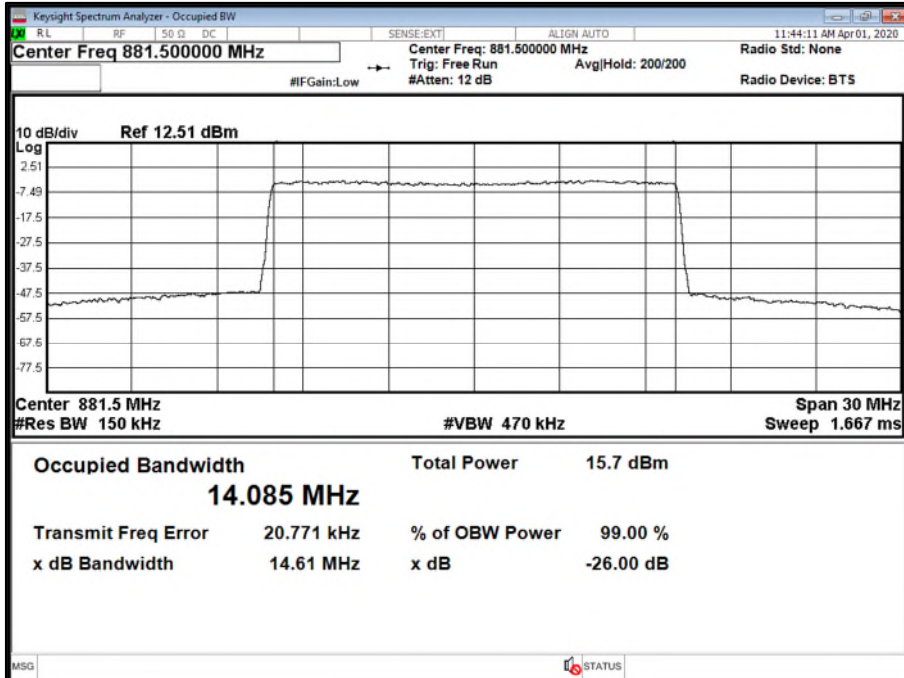
Antenna B - NR Modulation QPSK - NR Carrier Bandwidth 15.0 MHz 15 kHz SCS - Channel Position M



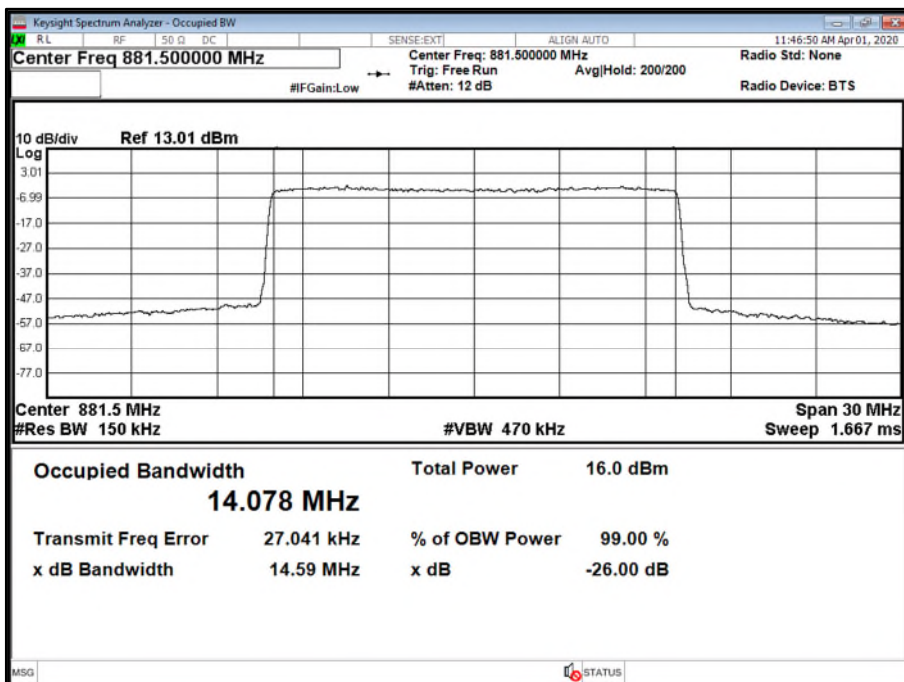


Product Service

Antenna C - NR Modulation QPSK - NR Carrier Bandwidth 15.0 MHz 15 kHz SCS - Channel Position M



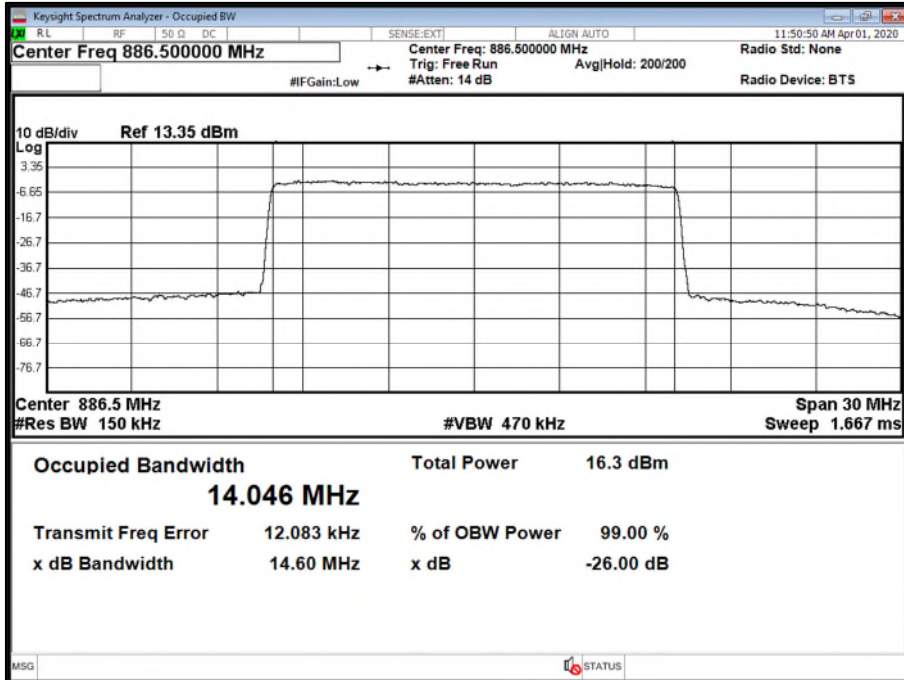
Antenna D - NR Modulation QPSK - NR Carrier Bandwidth 15.0 MHz 15 kHz SCS - Channel Position M



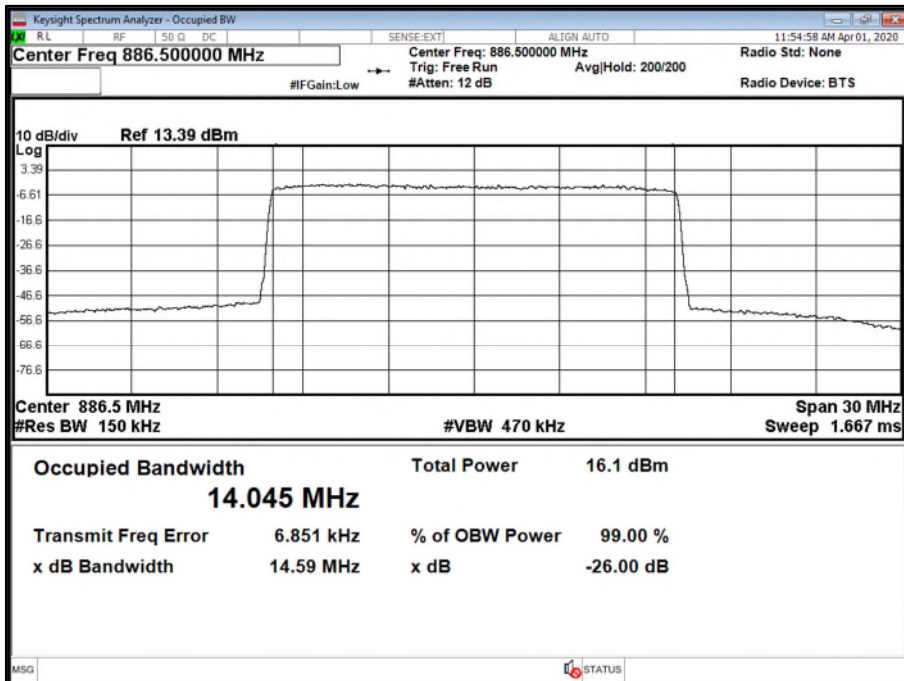


Product Service

Antenna A - NR Modulation QPSK - NR Carrier Bandwidth 15.0 MHz 15 kHz SCS - Channel Position T



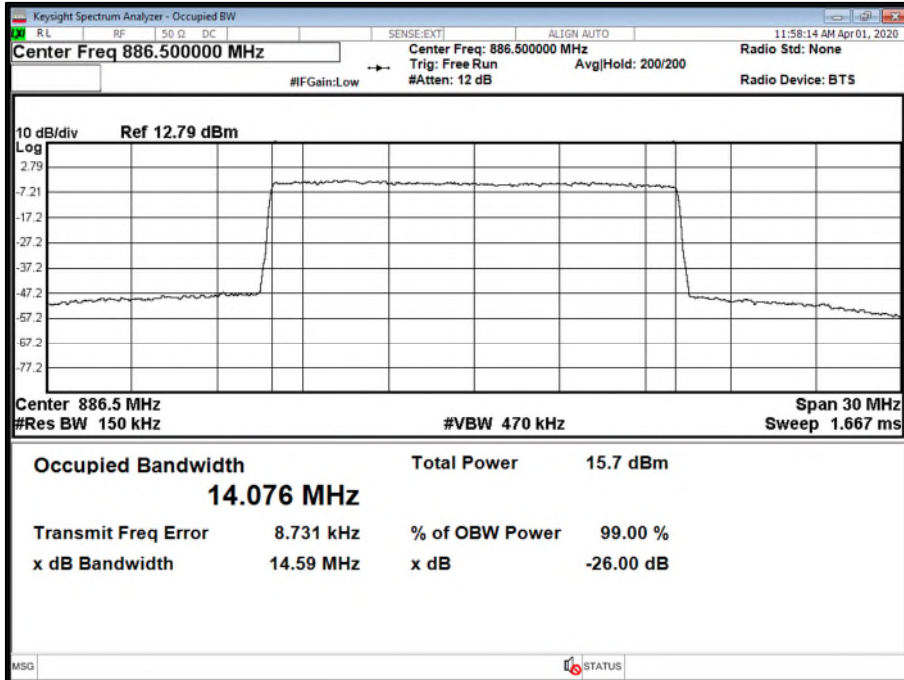
Antenna B - NR Modulation QPSK - NR Carrier Bandwidth 15.0 MHz 15 kHz SCS - Channel Position T



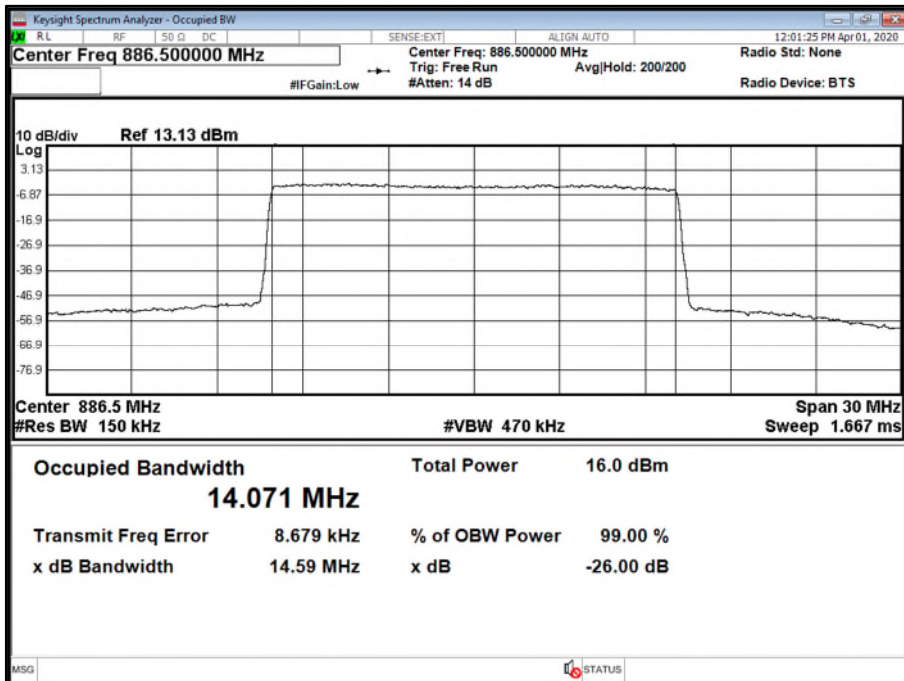


Product Service

Antenna C - NR Modulation QPSK - NR Carrier Bandwidth 15.0 MHz 15 kHz SCS - Channel Position T



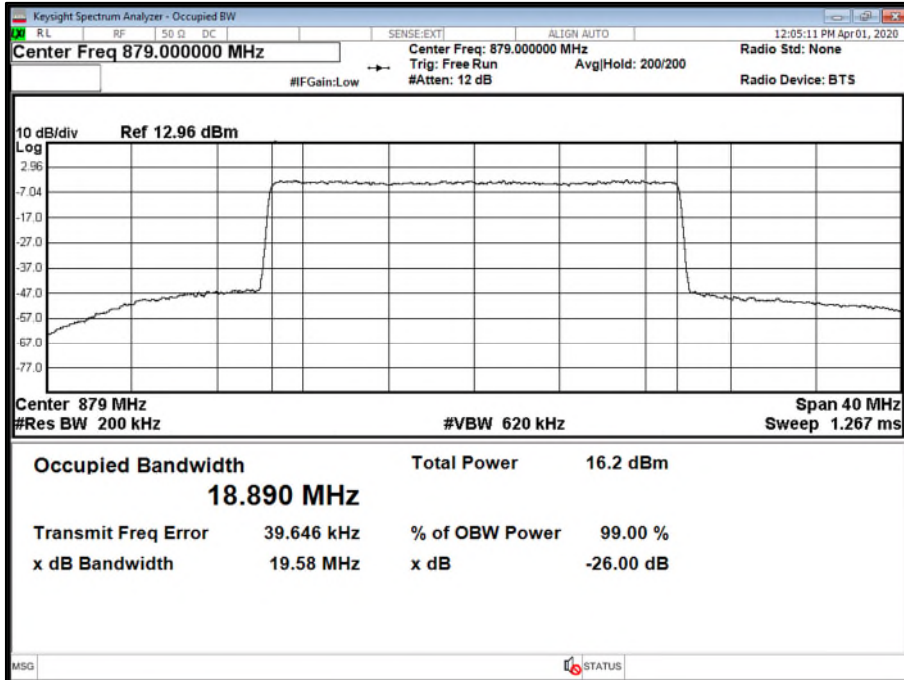
Antenna D - NR Modulation QPSK - NR Carrier Bandwidth 15.0 MHz 15 kHz SCS - Channel Position T



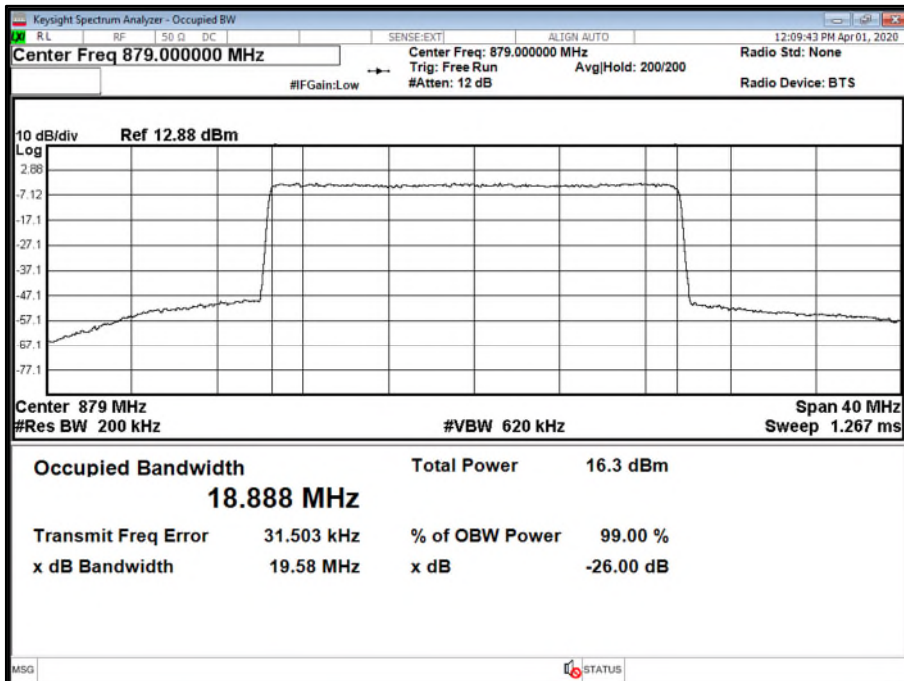


Product Service

Antenna A - NR Modulation QPSK - NR Carrier Bandwidth 20.0 MHz 15 kHz SCS - Channel Position B



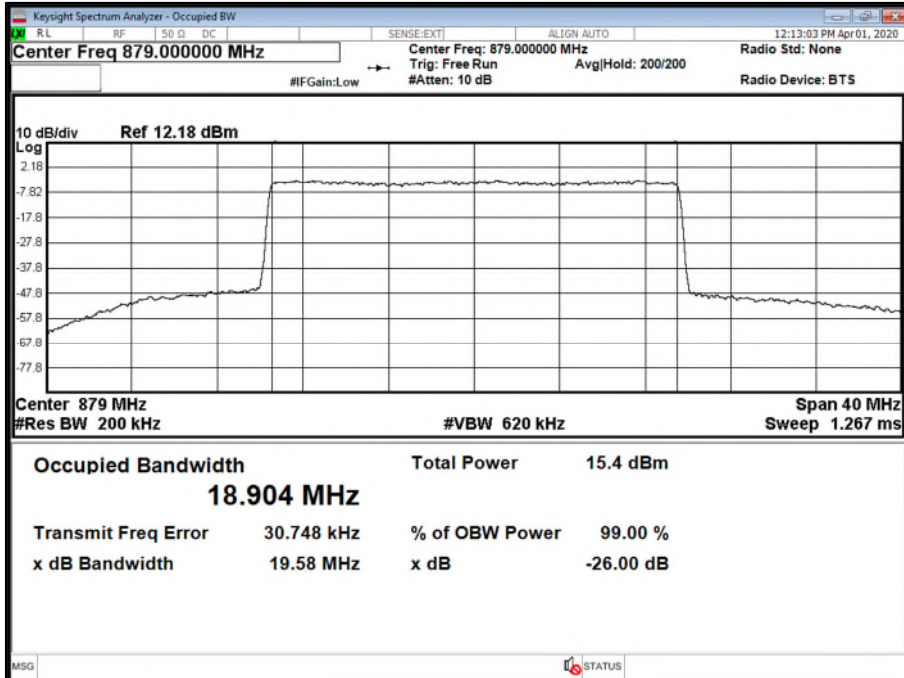
Antenna B - NR Modulation QPSK - NR Carrier Bandwidth 20.0 MHz 15 kHz SCS - Channel Position B



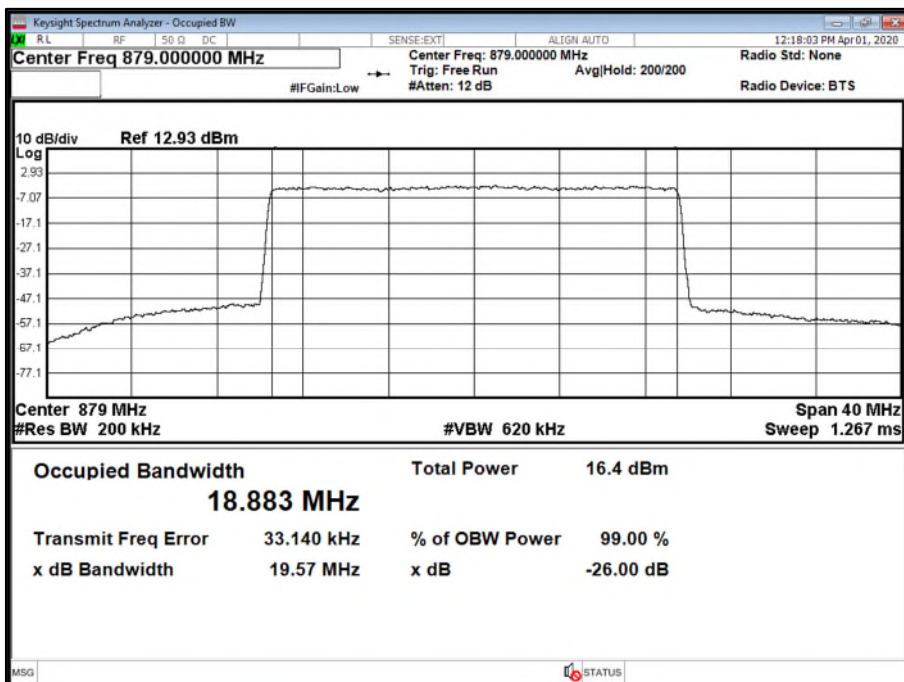


Product Service

Antenna C - NR Modulation QPSK - NR Carrier Bandwidth 20.0 MHz 15 kHz SCS - Channel Position B



Antenna D - NR Modulation QPSK - NR Carrier Bandwidth 20.0 MHz 15 kHz SCS - Channel Position B

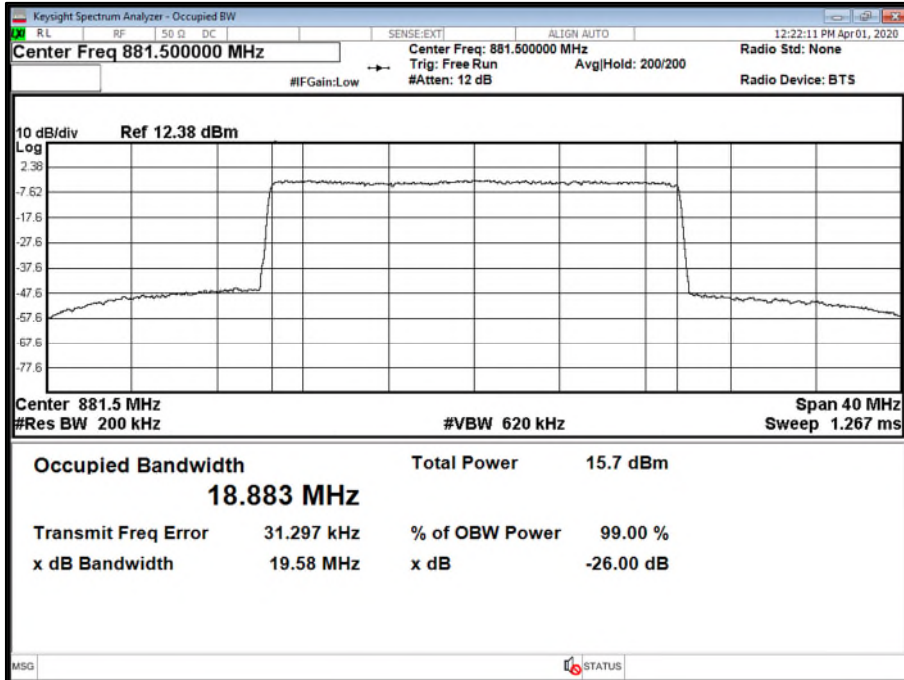




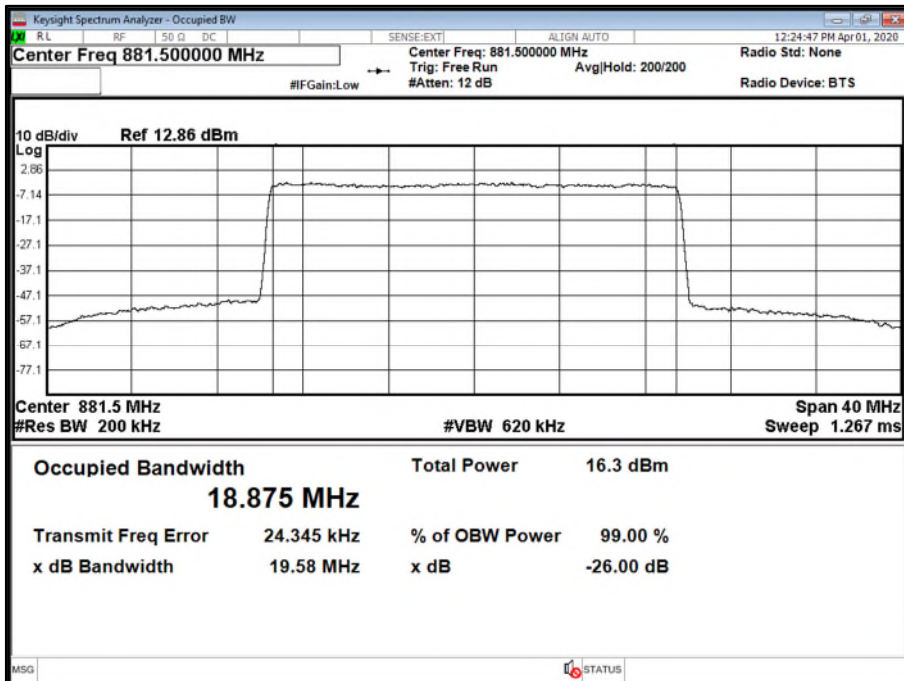


Product Service

Antenna A - NR Modulation QPSK - NR Carrier Bandwidth 20.0 MHz 15 kHz SCS - Channel Position M



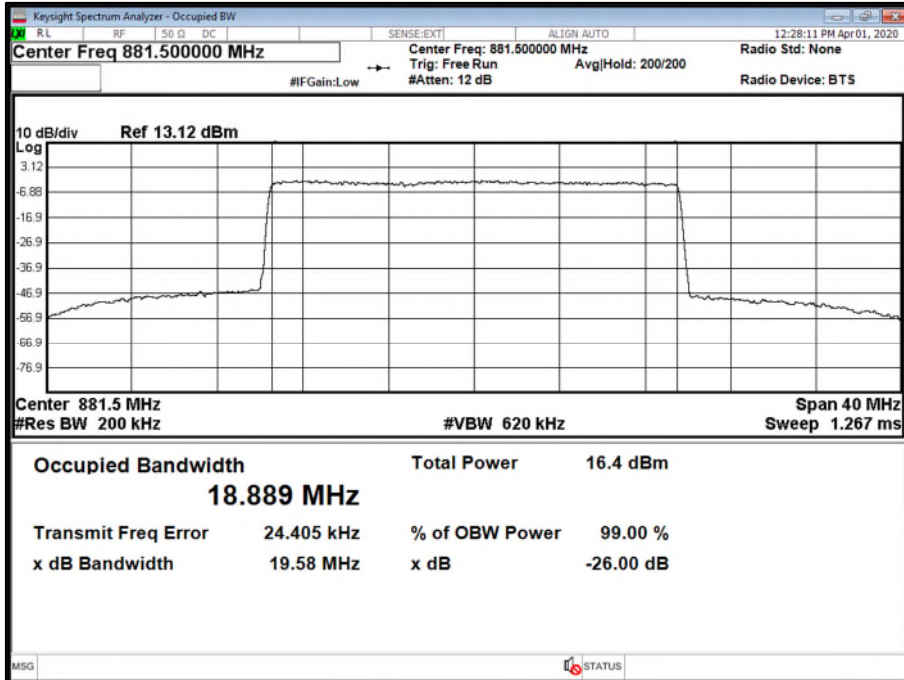
Antenna B - NR Modulation QPSK - NR Carrier Bandwidth 20.0 MHz 15 kHz SCS - Channel Position M



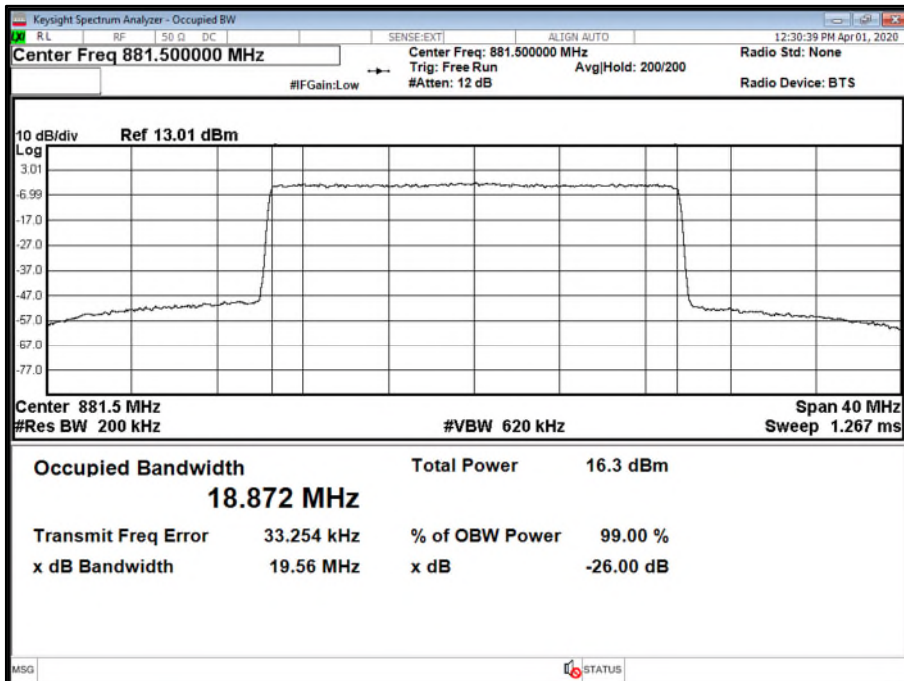


Product Service

Antenna C - NR Modulation QPSK - NR Carrier Bandwidth 20.0 MHz 15 kHz SCS - Channel Position M



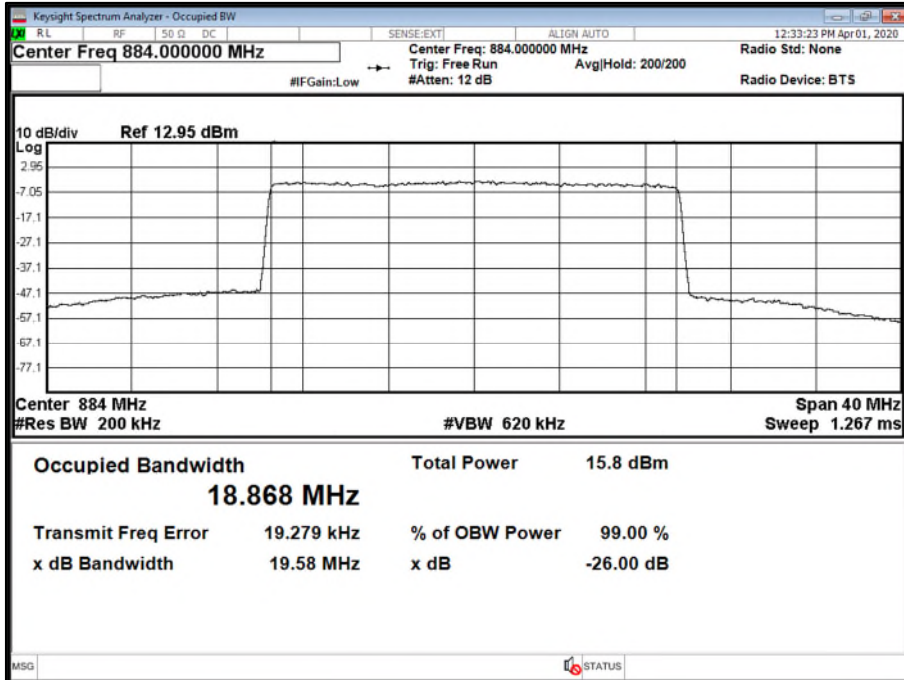
Antenna D - NR Modulation QPSK - NR Carrier Bandwidth 20.0 MHz 15 kHz SCS - Channel Position M



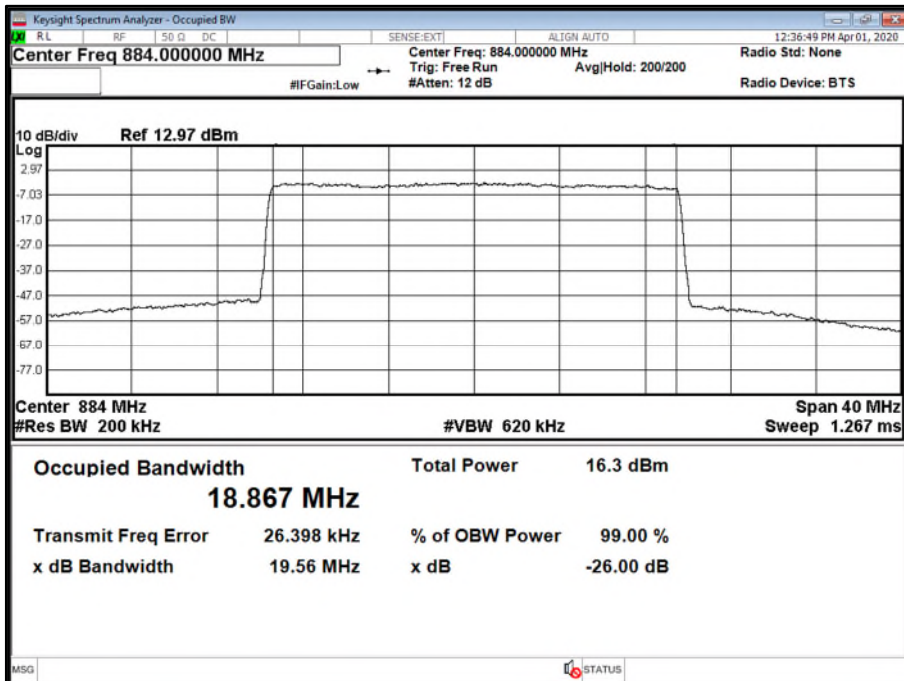


Product Service

Antenna A - NR Modulation QPSK - NR Carrier Bandwidth 20.0 MHz 15 kHz SCS - Channel Position T



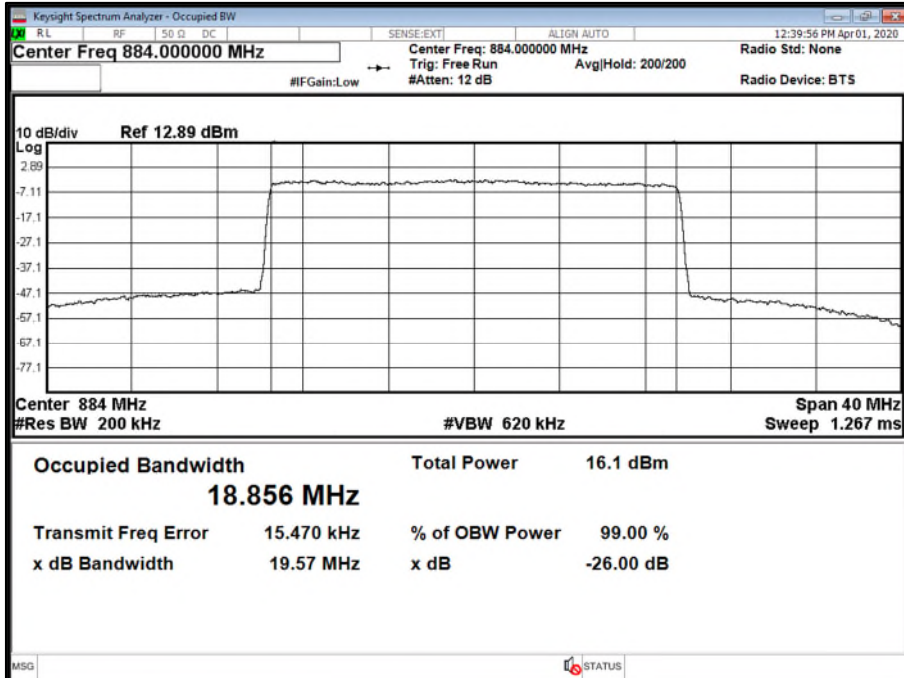
Antenna B - NR Modulation QPSK - NR Carrier Bandwidth 20.0 MHz 15 kHz SCS - Channel Position T



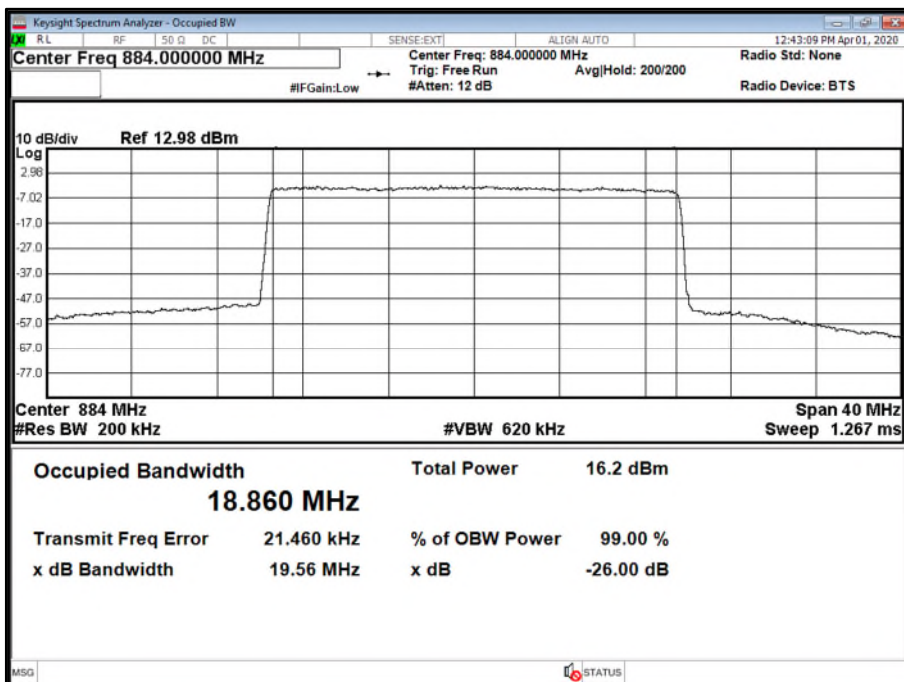


Product Service

Antenna C - NR Modulation QPSK - NR Carrier Bandwidth 20.0 MHz 15 kHz SCS - Channel Position T



Antenna D - NR Modulation QPSK - NR Carrier Bandwidth 20.0 MHz 15 kHz SCS - Channel Position T





Product Service

FCC PART 27

Configuration G

Maximum Output Power 17.0 dBm per port

Antenna	LTE Modulation	LTE Carrier Bandwidth	Result (KHz)					
			Channel Position B		Channel Position M		Channel Position T	
			Occupied Bandwidth	-26 dB Bandwidth	Occupied Bandwidth	-26 dB Bandwidth	Occupied Bandwidth	-26 dB Bandwidth
A	QPSK	5.0 MHz	4.47	4.78	4.48	4.80	4.47	4.79
B	QPSK	5.0 MHz	4.47	4.79	4.48	4.80	4.47	4.77
C	QPSK	5.0 MHz	4.47	4.78	4.48	4.80	4.47	4.79
D	QPSK	5.0 MHz	4.47	4.79	4.47	4.80	4.47	4.77
A	QPSK	10.0 MHz			9.39	9.75		
B	QPSK	10.0 MHz			9.40	9.76		
C	QPSK	10.0 MHz			9.40	9.74		
D	QPSK	10.0 MHz			9.39	9.78		

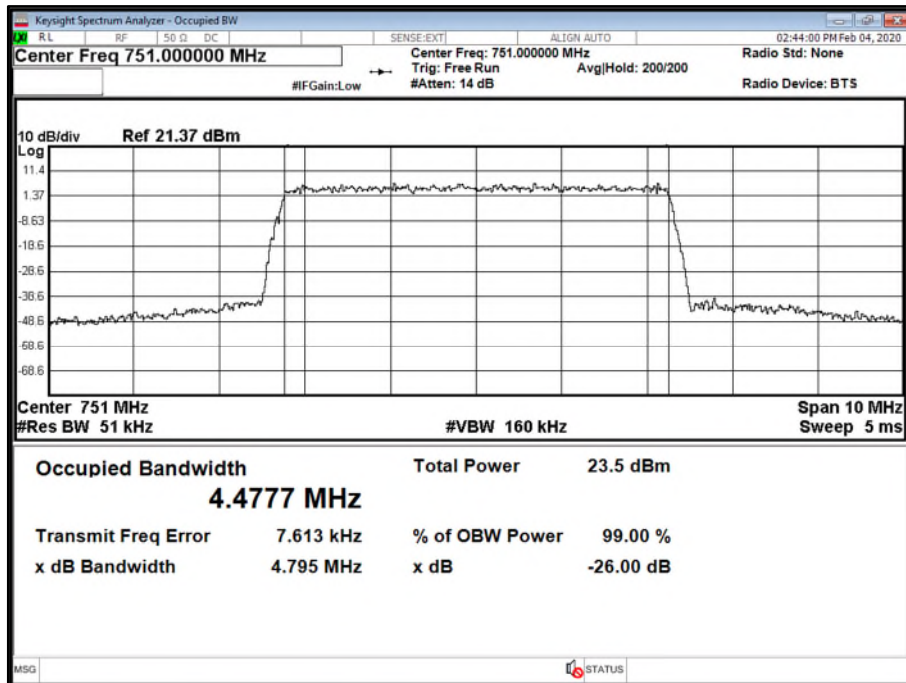
Remarks

All TX ports and channel have been characterized in the table. Mid band plots have been presented.

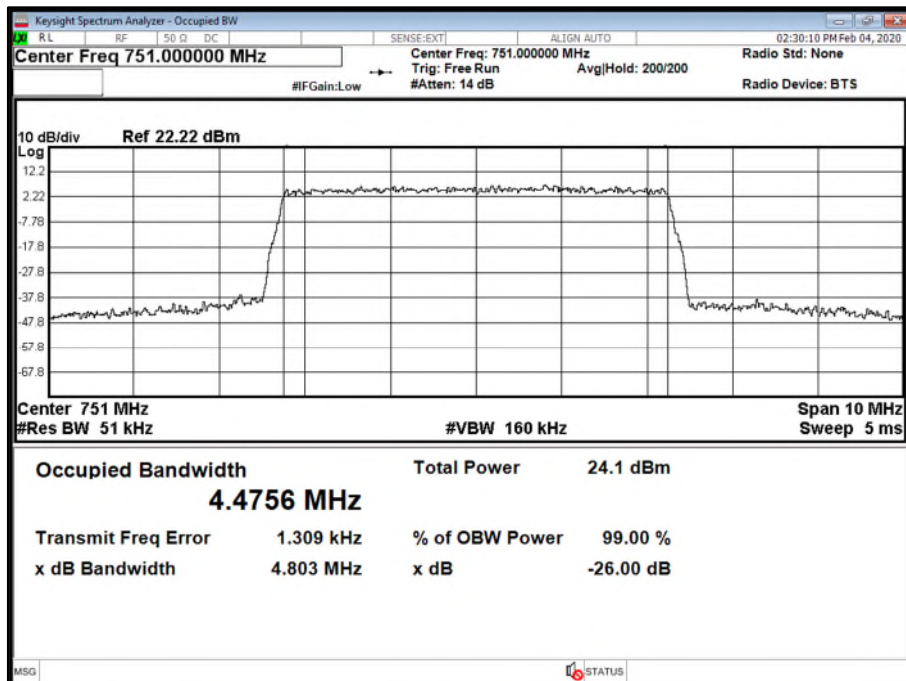


Product Service

Antenna A - LTE Modulation QPSK - LTE Carrier Bandwidth 5.0 MHz - Channel Position M



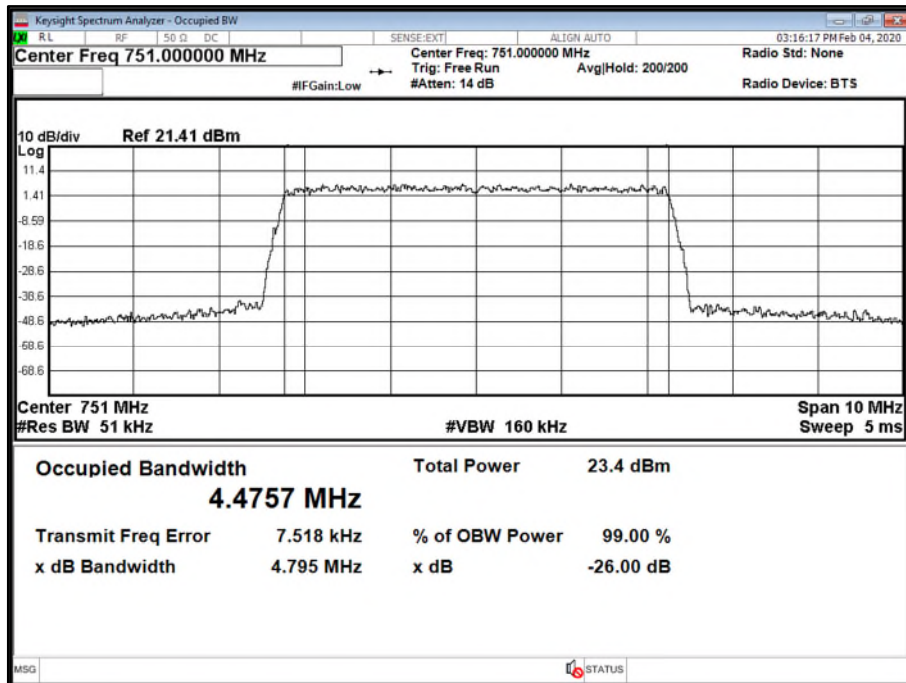
Antenna B - LTE Modulation QPSK - LTE Carrier Bandwidth 5.0 MHz - Channel Position M



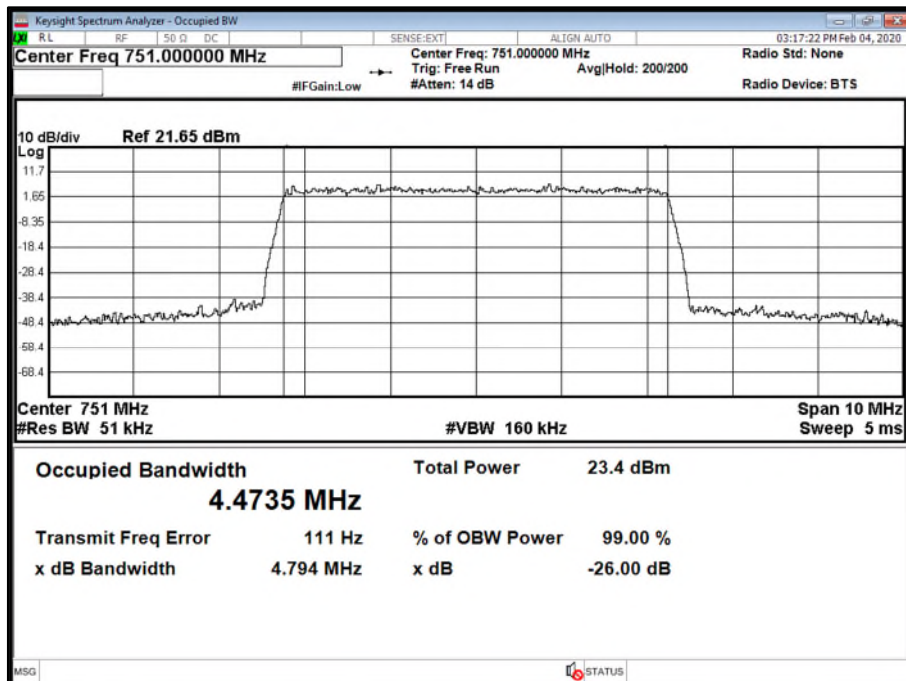


Product Service

Antenna C - LTE Modulation QPSK - LTE Carrier Bandwidth 5.0 MHz - Channel Position M



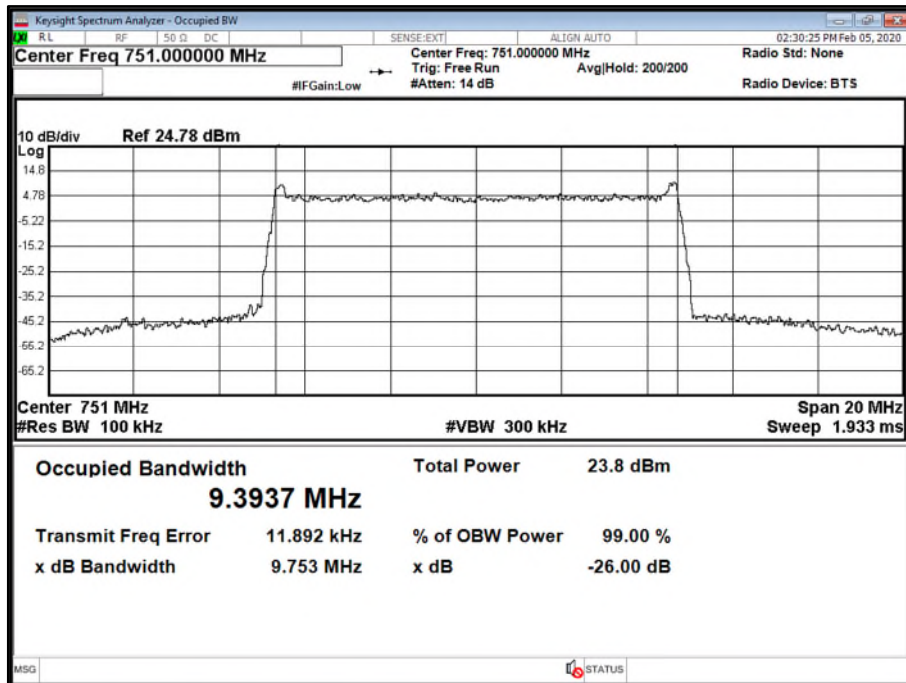
Antenna D - LTE Modulation QPSK - LTE Carrier Bandwidth 5.0 MHz - Channel Position M



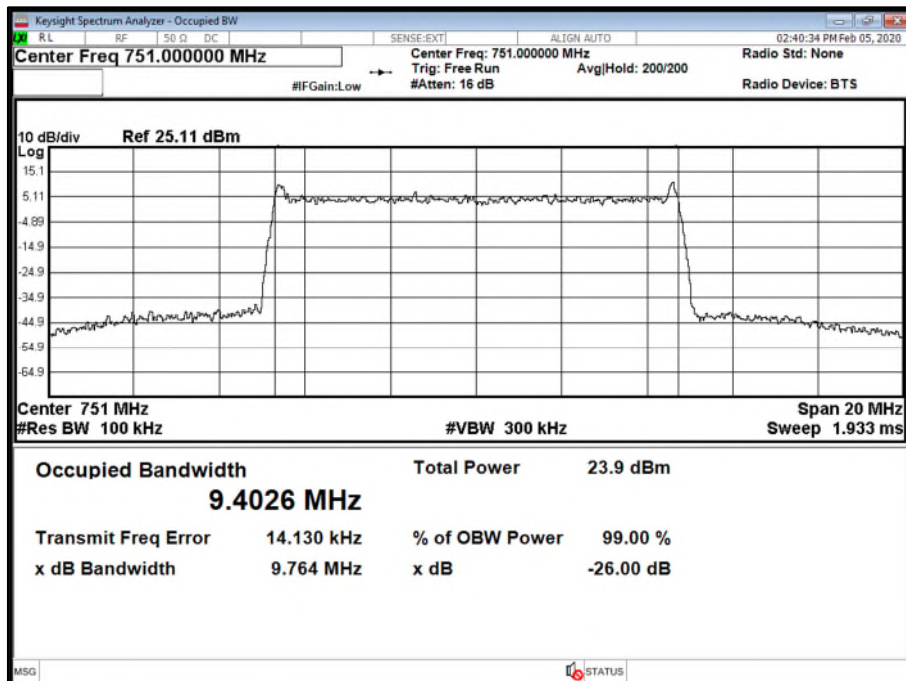


Product Service

Antenna A - LTE Modulation QPSK - LTE Carrier Bandwidth 10.0 MHz - Channel Position M



Antenna B - LTE Modulation QPSK - LTE Carrier Bandwidth 10.0 MHz - Channel Position M

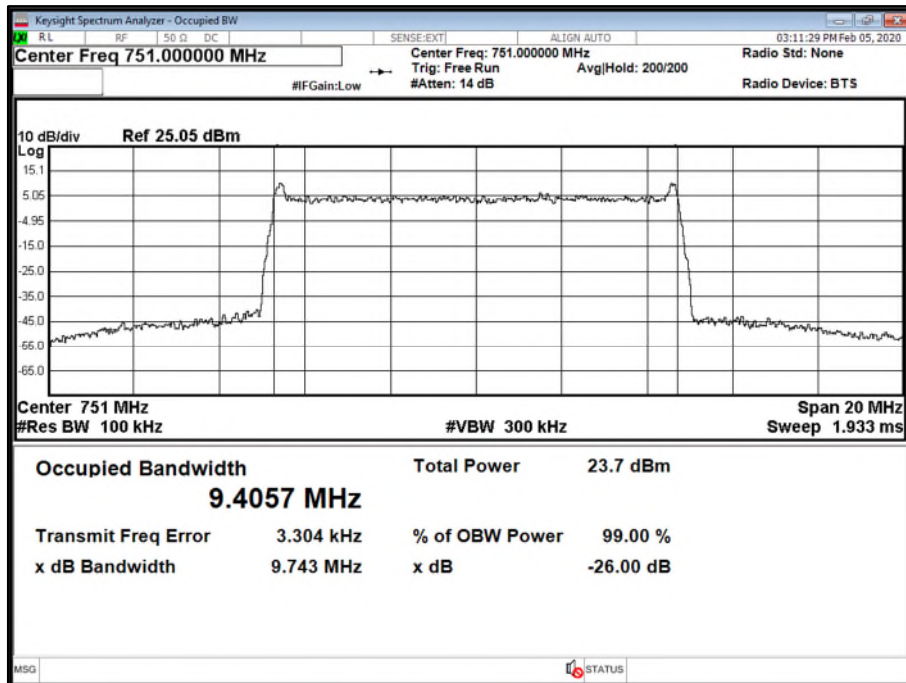




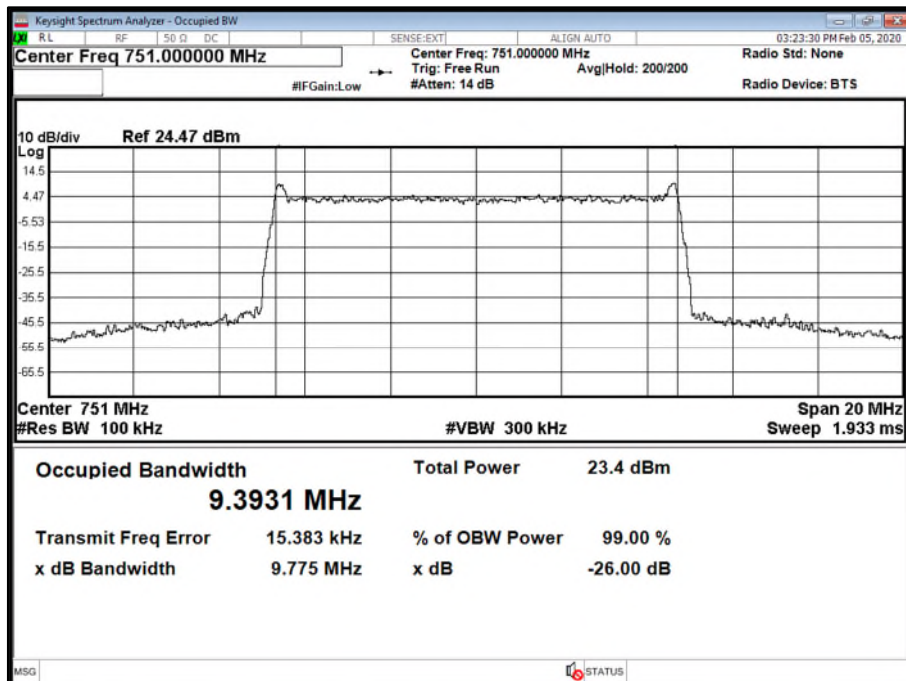


Product Service

Antenna C - LTE Modulation QPSK - LTE Carrier Bandwidth 10.0 MHz - Channel Position M



Antenna D - LTE Modulation QPSK - LTE Carrier Bandwidth 10.0 MHz - Channel Position M





## 2.3 BAND EDGE

### 2.3.1 Specification Reference

FCC CFR 47 Part 22, Clause 22.905  
FCC CFR 47 Part 27, Clause 27.53 (h)  
FCC CFR 47 Part 2, Clause 2.1051

### 2.3.2 Date of Test and Modification State

31 March, 04 and 06 February 2020 - Modification State 0

### 2.3.3 Test Equipment Used

The major items of test equipment used for the above tests are identified in Section 3.1.

### 2.3.4 Environmental Conditions

Ambient Temperature 23.5-26.3°C  
Relative Humidity 31.3-36.9%

### 2.3.5 Test Method

All measurements were made in accordance with FCC KDB 971168 D01.

Each of the 2 bands of the EUT has 4 transmit ports, therefore, the test limits used were calculated on a worst case basis accounting for an effective 4 port MIMO configuration. Testing was performed on this port with a test limit of

$$43+10\log(P) - 10\log(4) = -19 \text{ dBm}$$

### 2.3.6 Test Results

#### FCC PART 22

Configuration A

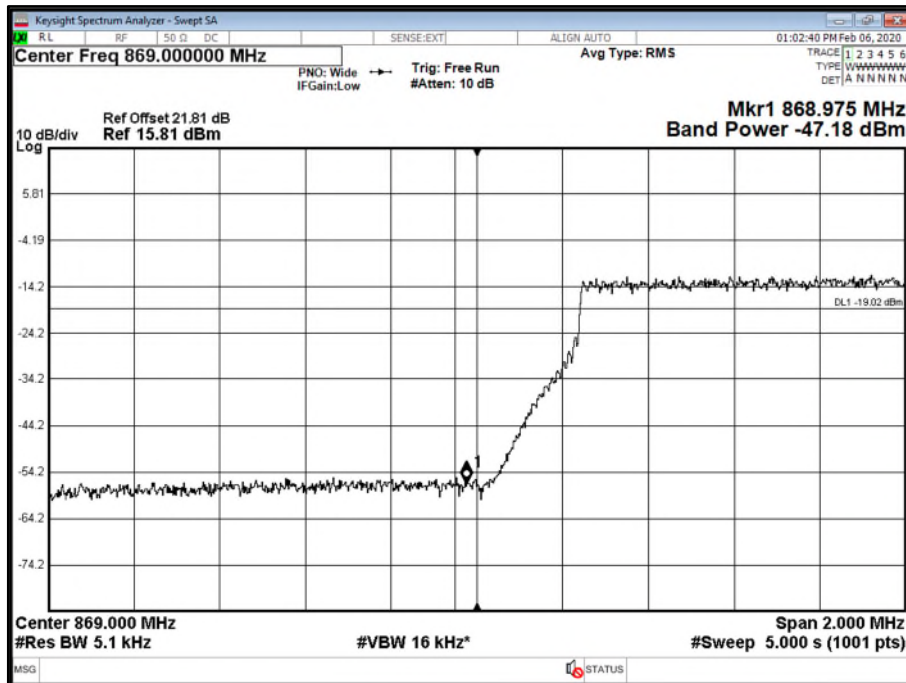
Maximum Output Power 17.0 dBm per port

Antenna	LTE Modulation	LTE Carrier Bandwidth	Band Edge (MHz)	
			Channel Position B	Channel Position T
A	QPSK	5.0 MHz	871.5	891.5
B	QPSK	5.0 MHz	871.5	891.5
C	QPSK	5.0 MHz	871.5	891.5
D	QPSK	5.0 MHz	871.5	891.5
A	QPSK	10.0 MHz	874.0	889.0
B	QPSK	10.0 MHz	874.0	889.0
C	QPSK	10.0 MHz	874.0	889.0
D	QPSK	10.0 MHz	874.0	889.0

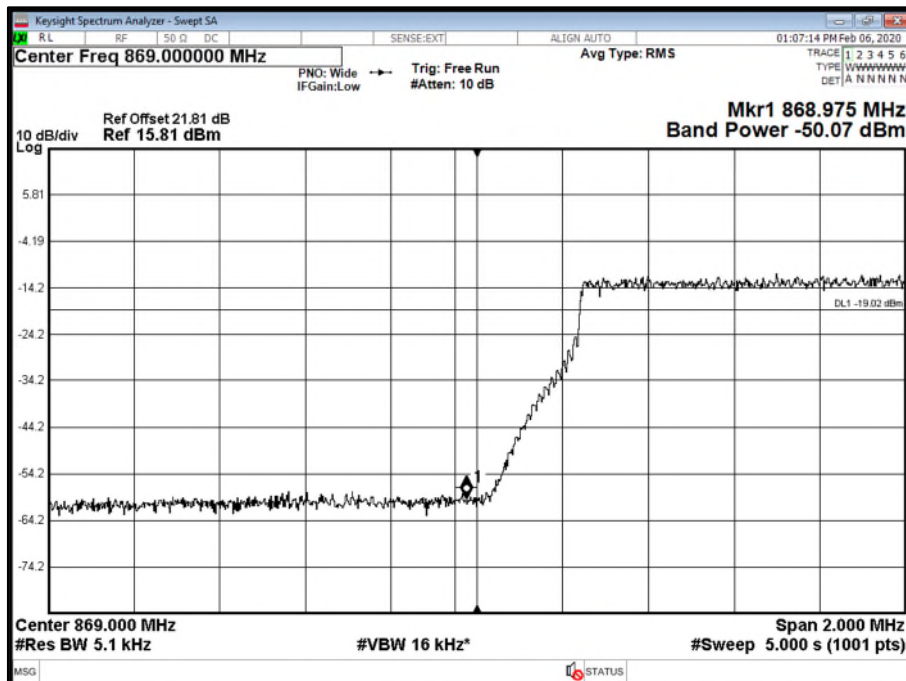


Product Service

Antenna A - LTE Modulation QPSK - LTE Carrier Bandwidth 5.0 MHz - Channel Position B



Antenna B - LTE Modulation QPSK - LTE Carrier Bandwidth 5.0 MHz - Channel Position B

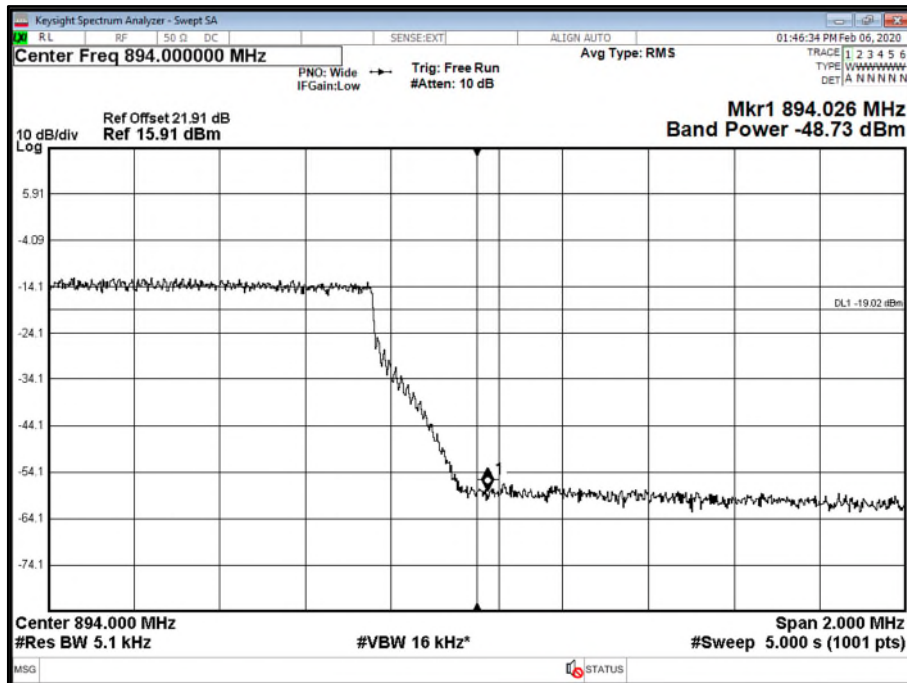




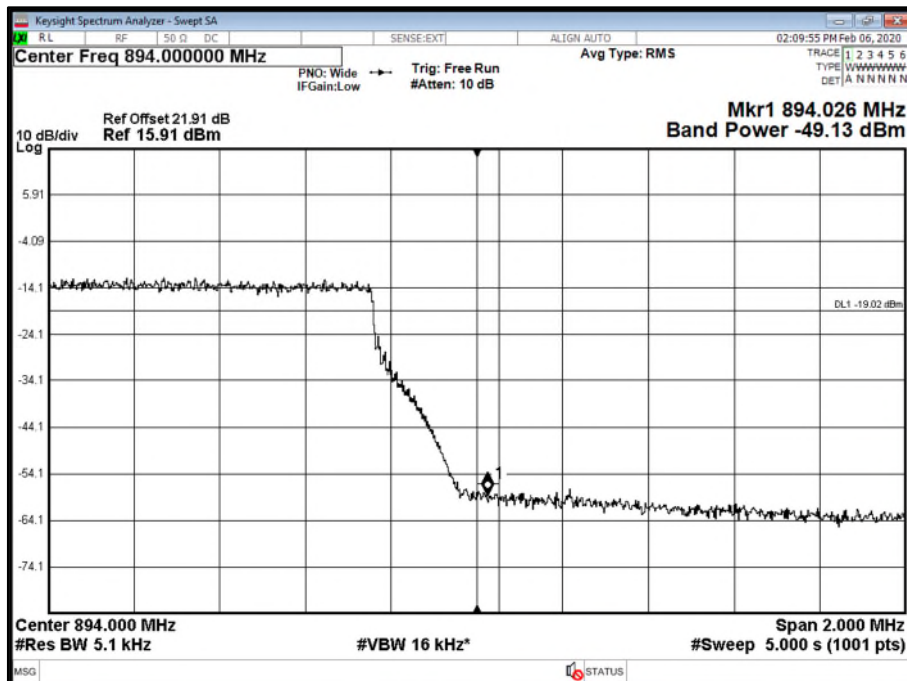


Product Service

Antenna A - LTE Modulation QPSK - LTE Carrier Bandwidth 5.0 MHz - Channel Position T



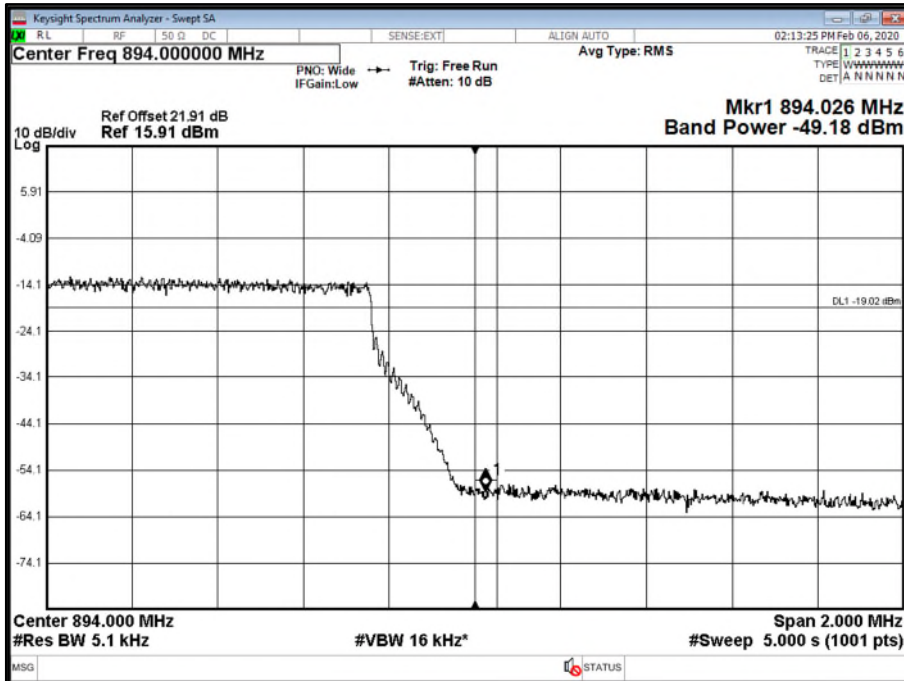
Antenna B - LTE Modulation QPSK - LTE Carrier Bandwidth 5.0 MHz - Channel Position T



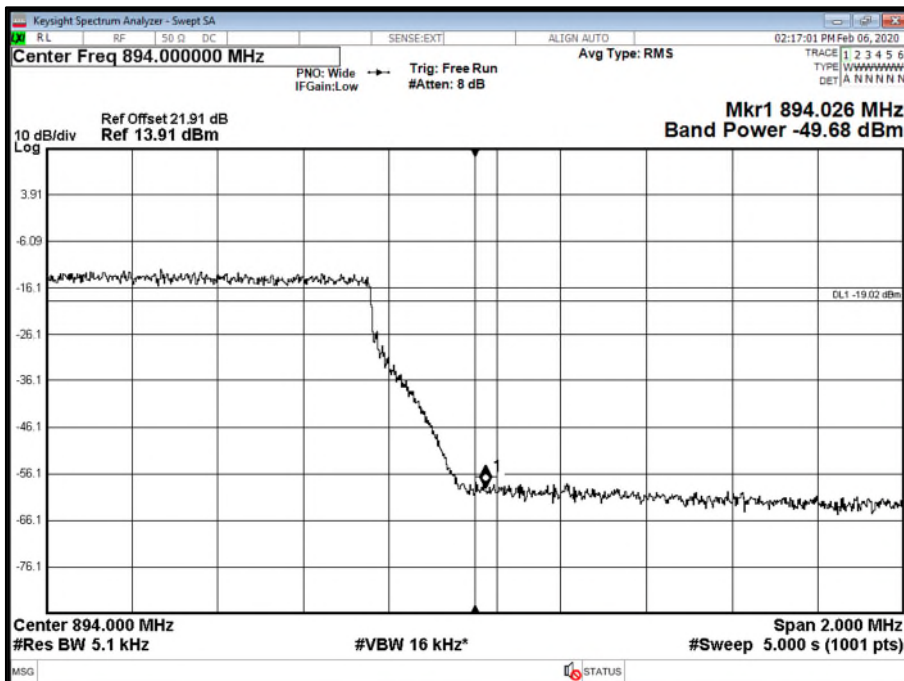


Product Service

Antenna C - LTE Modulation QPSK - LTE Carrier Bandwidth 5.0 MHz - Channel Position T



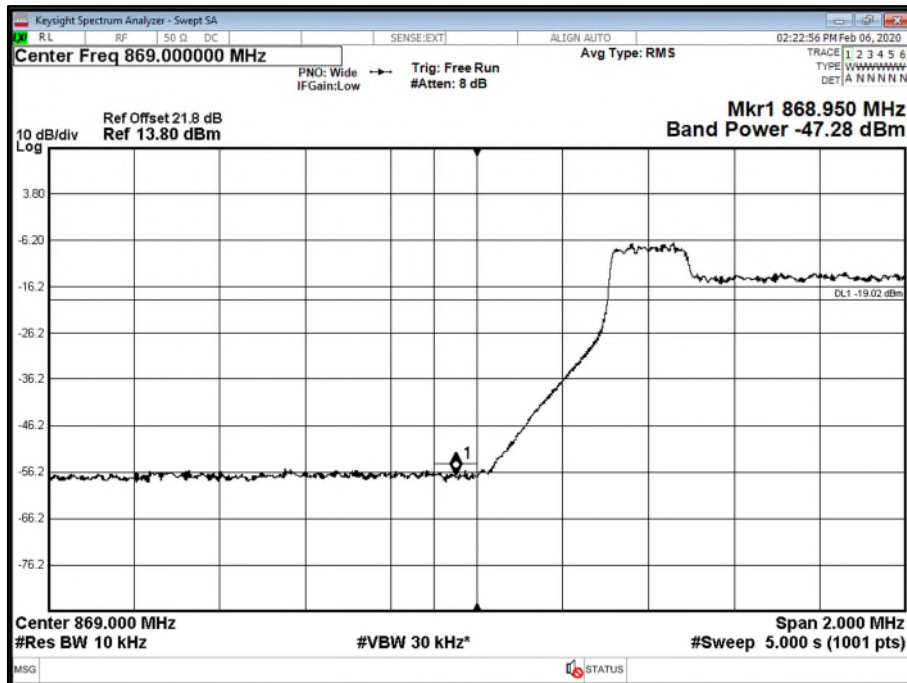
Antenna D - LTE Modulation QPSK - LTE Carrier Bandwidth 5.0 MHz - Channel Position T



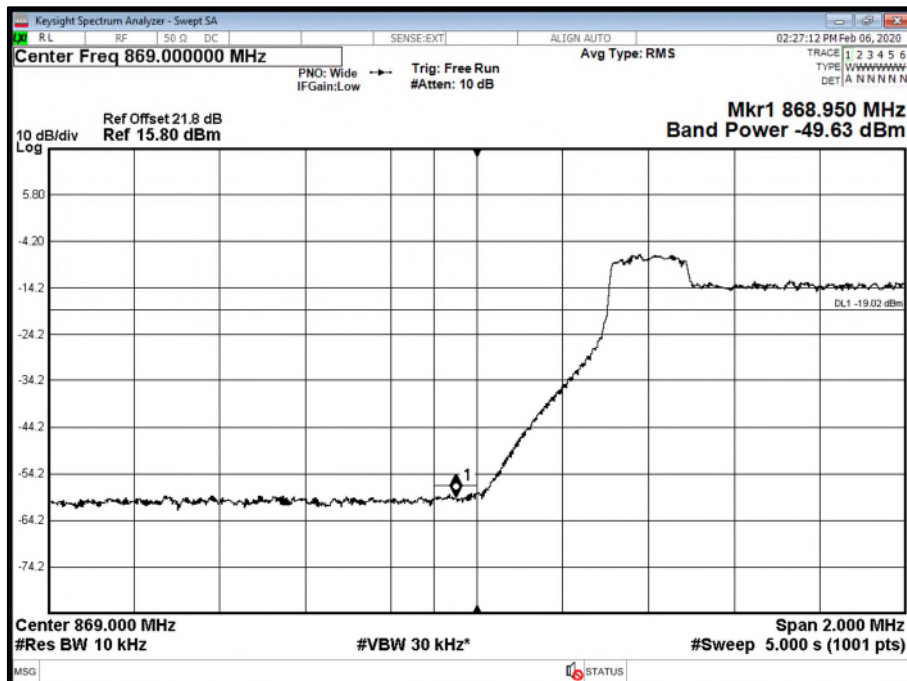


Product Service

Antenna A - LTE Modulation QPSK - LTE Carrier Bandwidth 10.0 MHz - Channel Position B



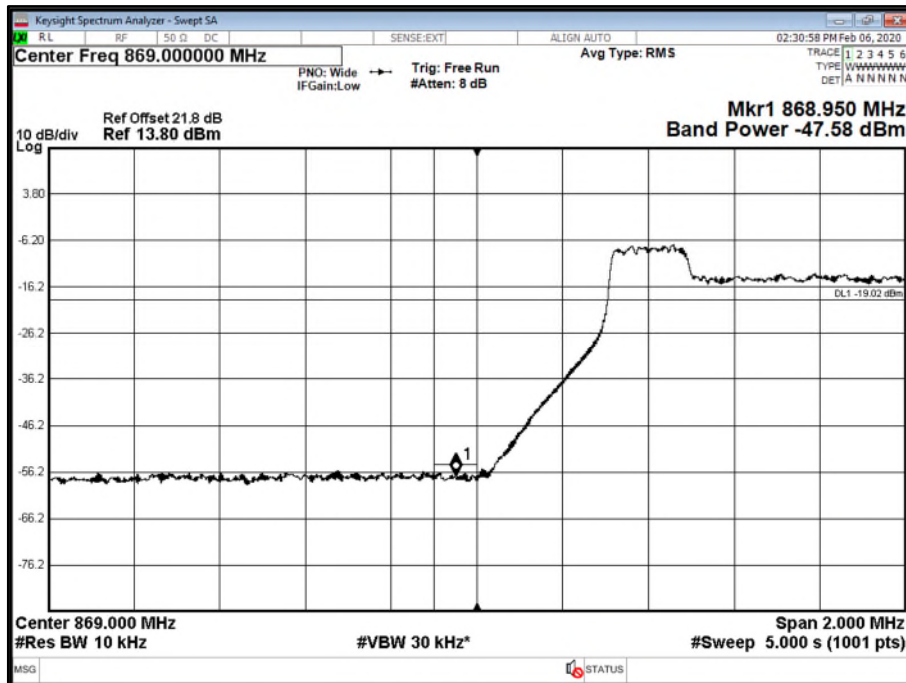
Antenna B - LTE Modulation QPSK - LTE Carrier Bandwidth 10.0 MHz - Channel Position B



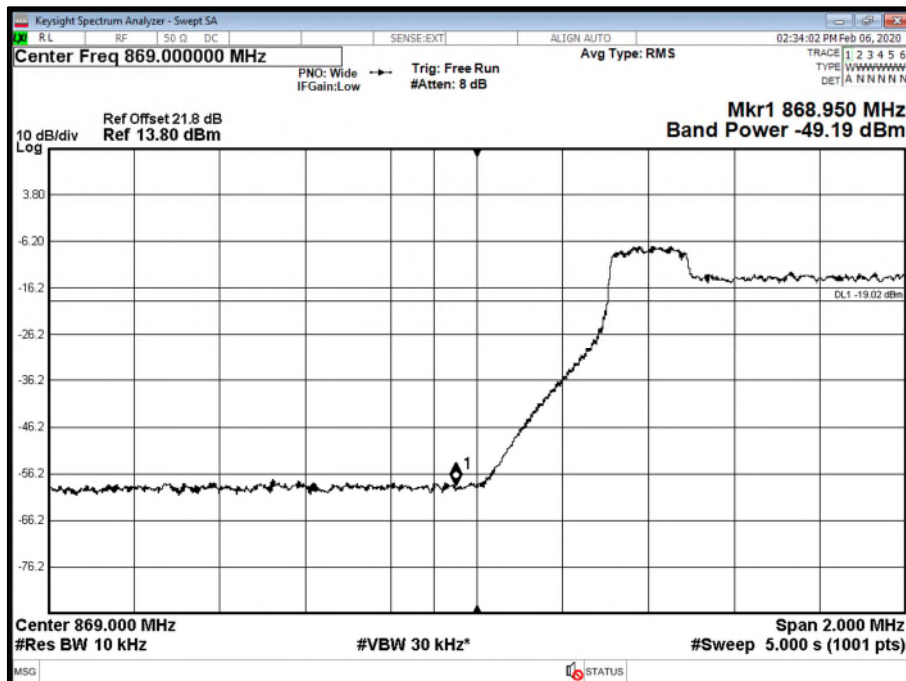


Product Service

Antenna C - LTE Modulation QPSK - LTE Carrier Bandwidth 10.0 MHz - Channel Position B



Antenna D - LTE Modulation QPSK - LTE Carrier Bandwidth 10.0 MHz - Channel Position B

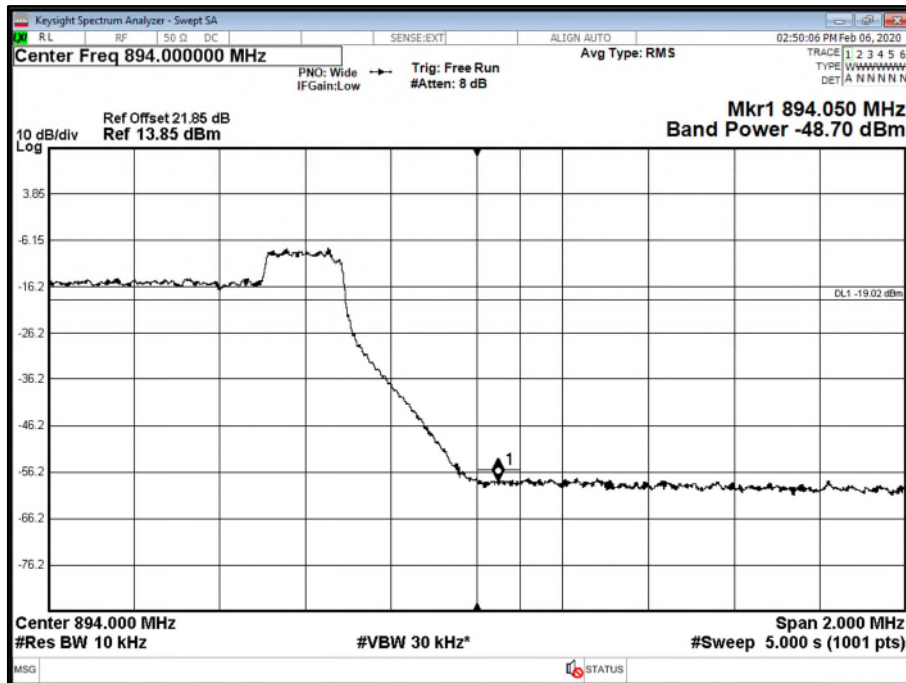




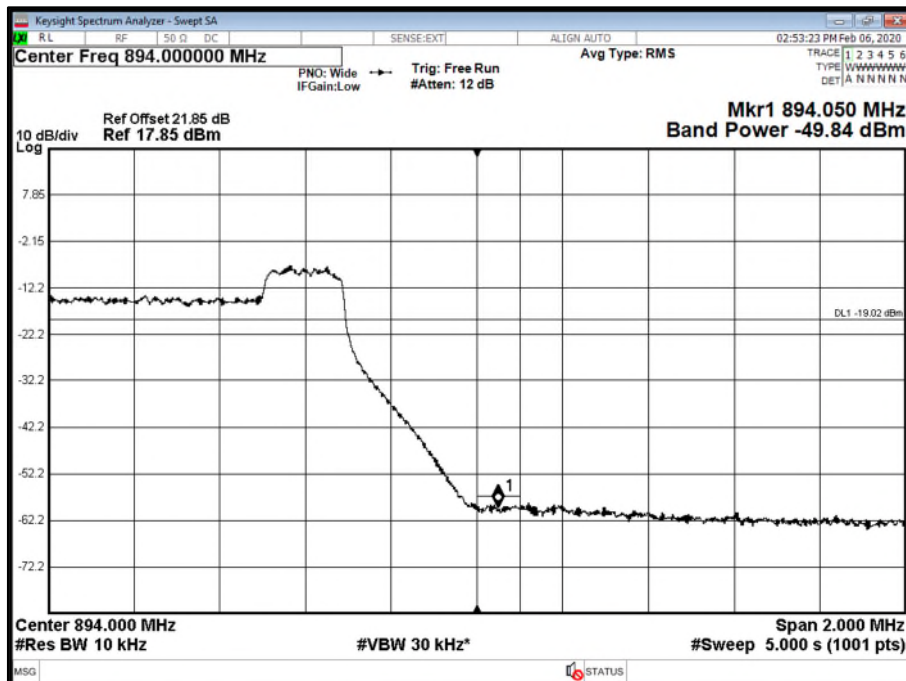


Product Service

Antenna A - LTE Modulation QPSK - LTE Carrier Bandwidth 10.0 MHz - Channel Position T



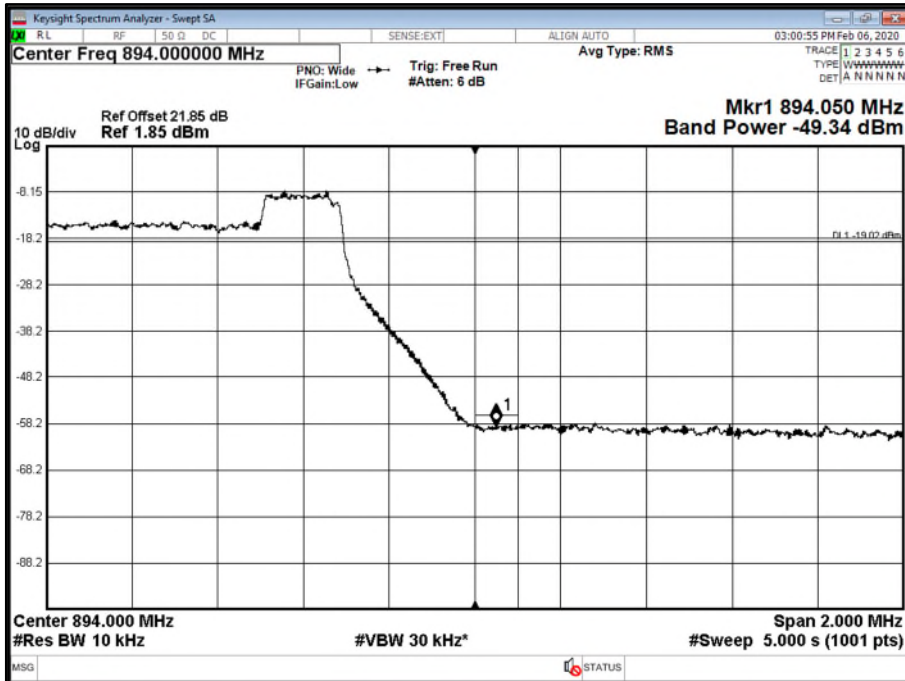
Antenna B - LTE Modulation QPSK - LTE Carrier Bandwidth 10.0 MHz - Channel Position T



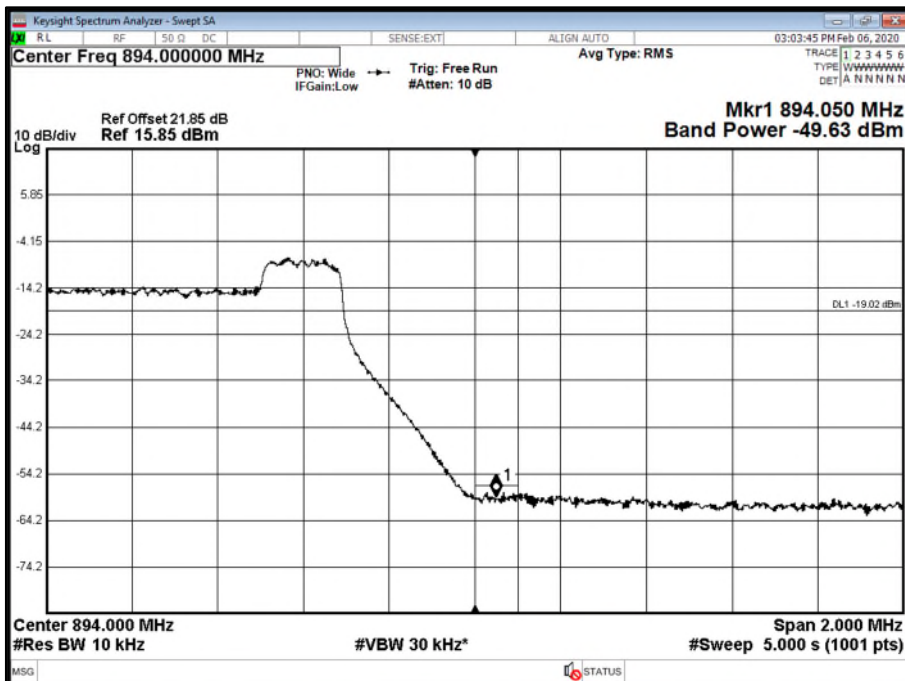


Product Service

Antenna C - LTE Modulation QPSK - LTE Carrier Bandwidth 10.0 MHz - Channel Position T



Antenna D - LTE Modulation QPSK - LTE Carrier Bandwidth 10.0 MHz - Channel Position T





Product Service

Configuration B

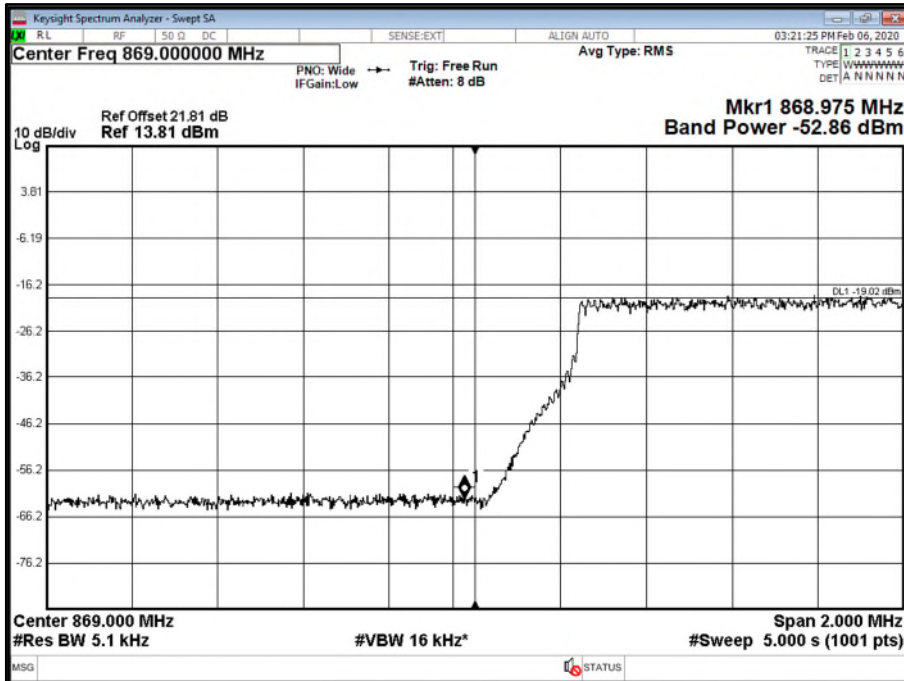
Maximum Output Power 17.0 dBm per port

Antenna	LTE Modulation	LTE Carrier Bandwidth	Band Edge (MHz)	
			Channel Position B	Channel Position T
A	QPSK	5.0+5.0+5.0+5.0+5.0 MHz	871.5+876.5+881.5+886.5+891 .5	871.5+876.5+881.5+886.5+891 1.5
B	QPSK	5.0+5.0+5.0+5.0+5.0 MHz	871.5+876.5+881.5+886.5+891 .6	871.5+876.5+881.5+886.5+891 1.6
C	QPSK	5.0+5.0+5.0+5.0+5.0 MHz	871.5+876.5+881.5+886.5+891 .7	871.5+876.5+881.5+886.5+891 1.7
D	QPSK	5.0+5.0+5.0+5.0+5.0 MHz	871.5+876.5+881.5+886.5+891 .8	871.5+876.5+881.5+886.5+891 1.8

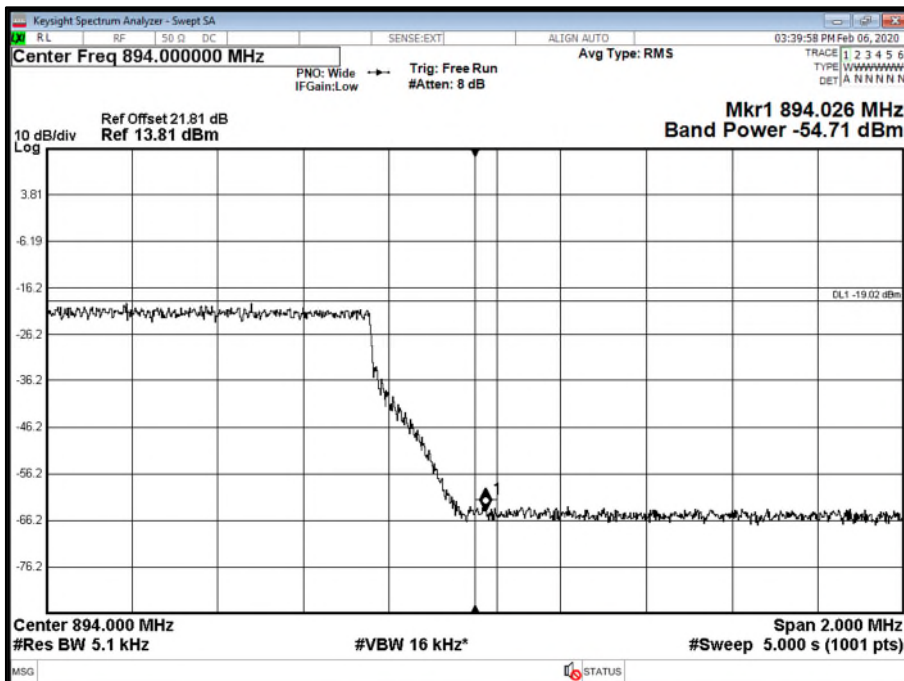


Product Service

Antenna A - LTE Modulation QPSK - LTE Carrier Bandwidth 5.0 MHz - Channel Position B



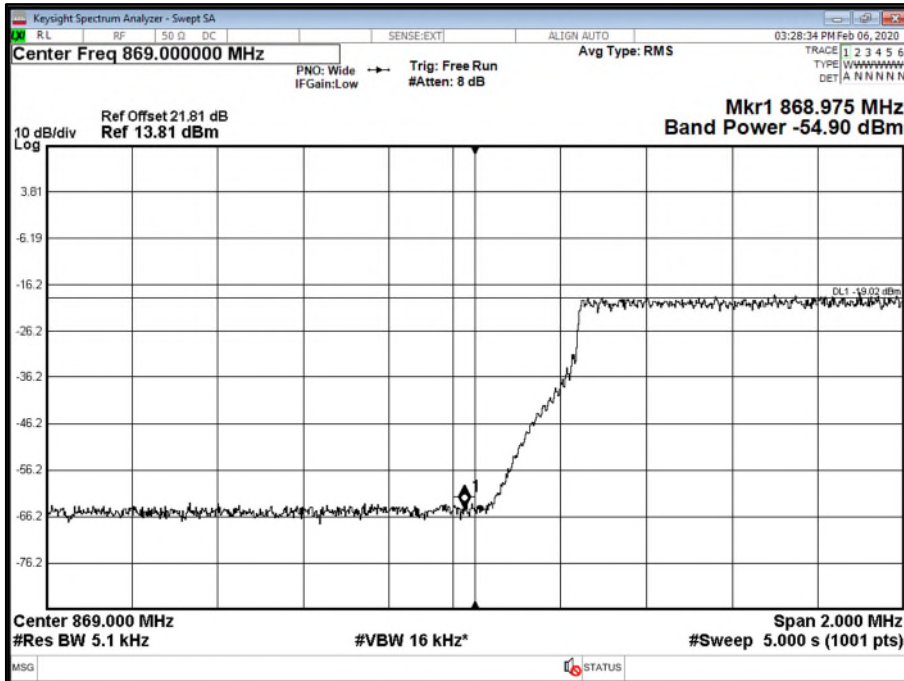
Antenna A - LTE Modulation QPSK - LTE Carrier Bandwidth 5.0 MHz - Channel Position T



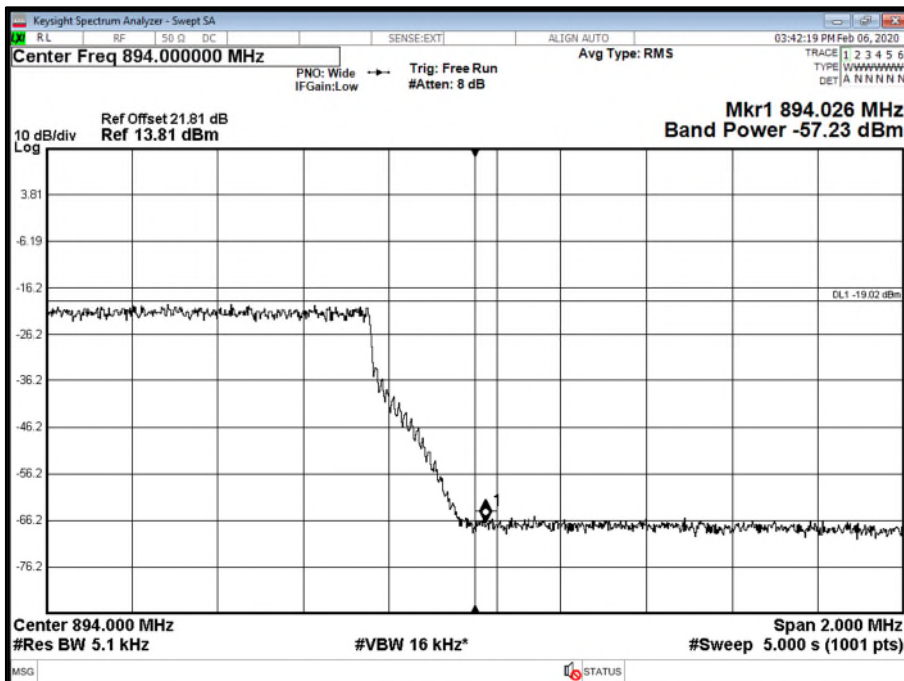


Product Service

Antenna B - LTE Modulation QPSK - LTE Carrier Bandwidth 5.0 MHz - Channel Position B



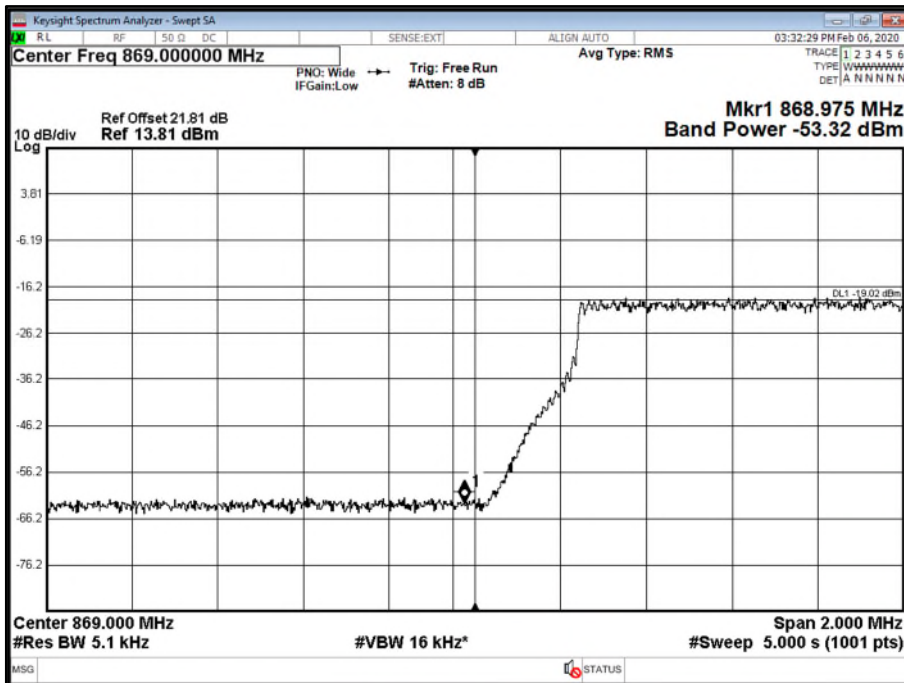
Antenna B - LTE Modulation QPSK - LTE Carrier Bandwidth 5.0 MHz - Channel Position T



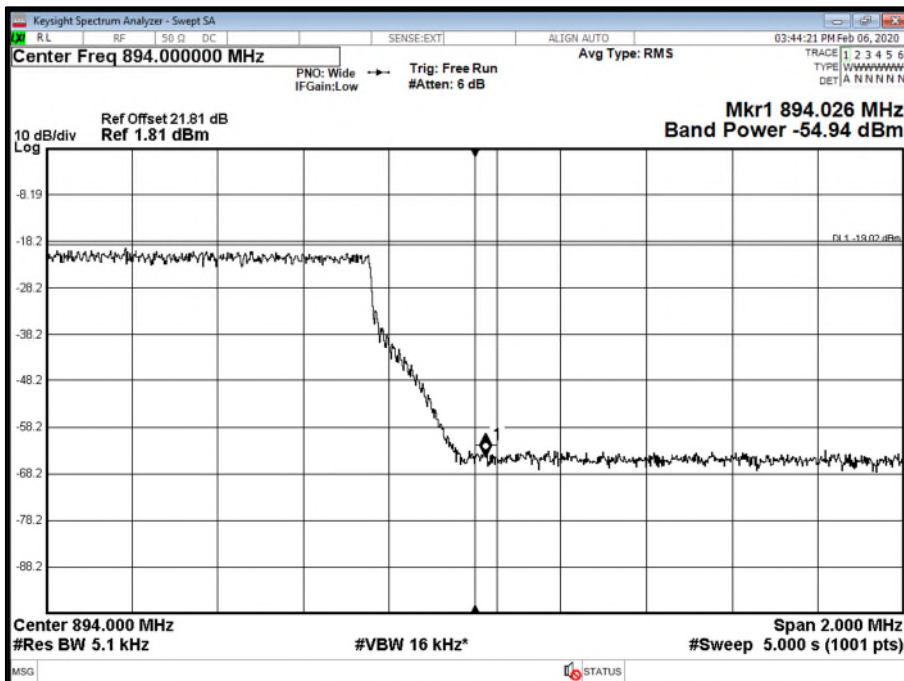


Product Service

Antenna C - LTE Modulation QPSK - LTE Carrier Bandwidth 5.0 MHz - Channel Position B



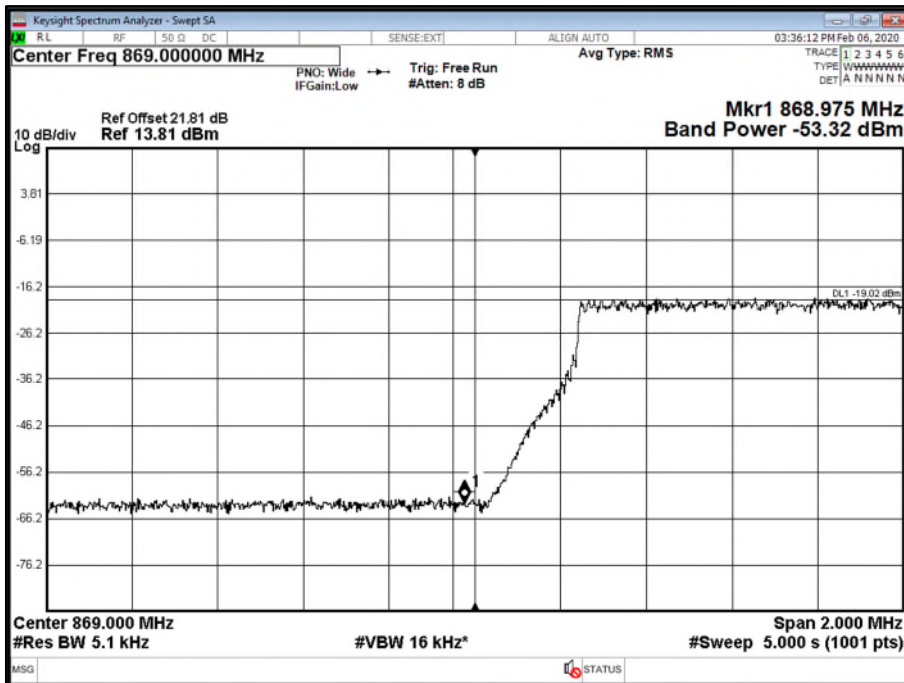
Antenna C - LTE Modulation QPSK - LTE Carrier Bandwidth 5.0 MHz - Channel Position T



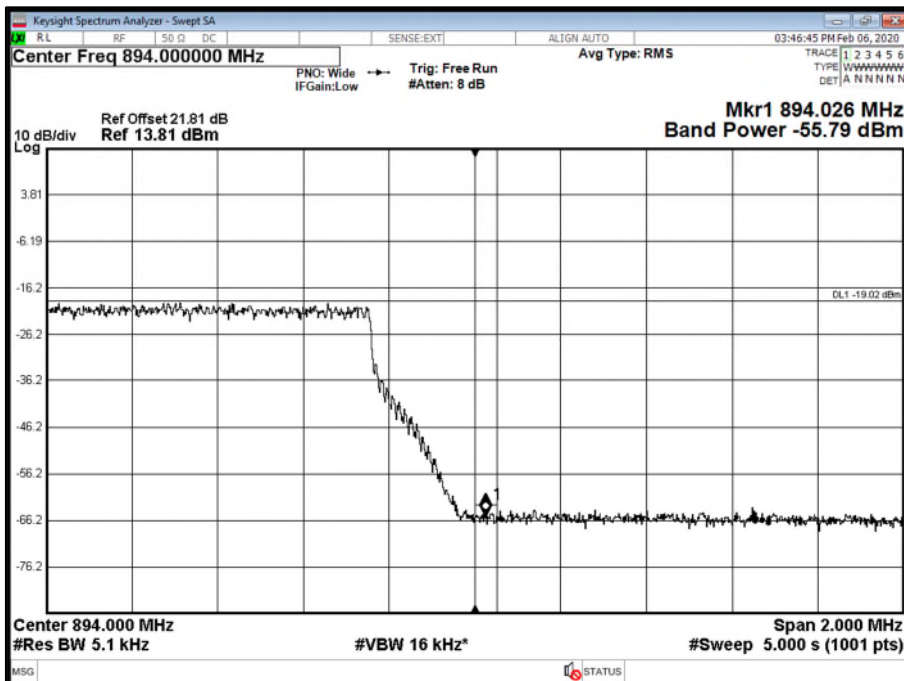


Product Service

Antenna D - LTE Modulation QPSK - LTE Carrier Bandwidth 5.0 MHz - Channel Position B



Antenna D - LTE Modulation QPSK - LTE Carrier Bandwidth 5.0 MHz - Channel Position T





Product Service

Configuration C

Maximum Output Power 17.0 dBm per port

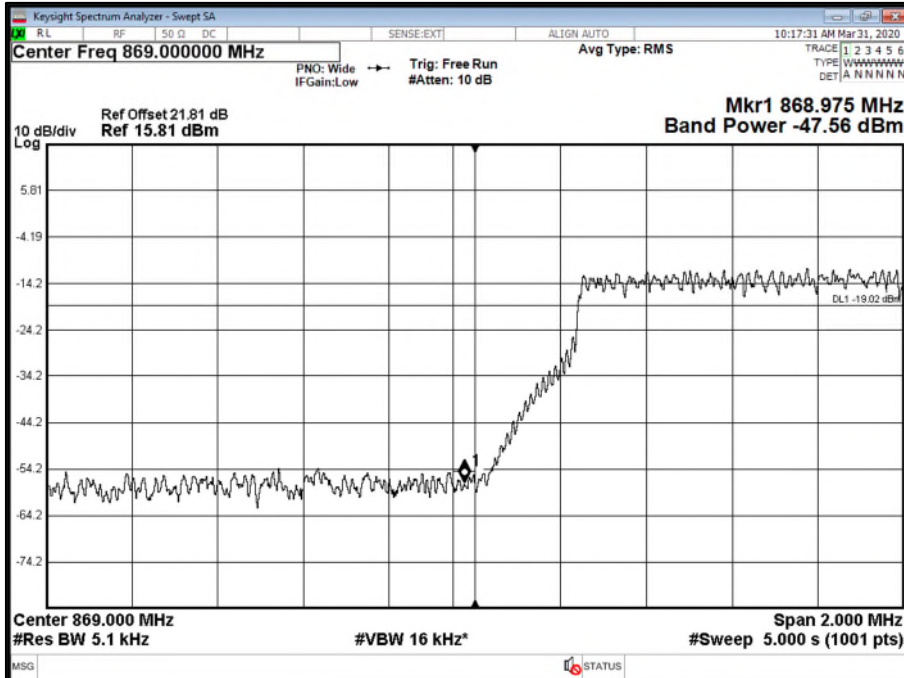
Antenna	NR Modulation	NR Carrier Bandwidth	Band Edge (MHz)	
			Channel Position B	Channel Position T
A	QPSK	5.0 MHz 15 kHz SCS	871.5	891.5
B	QPSK	5.0 MHz 15 kHz SCS	871.5	891.5
C	QPSK	5.0 MHz 15 kHz SCS	871.5	891.5
D	QPSK	5.0 MHz 15 kHz SCS	871.5	891.5
A	QPSK	10.0 MHz 15 kHz SCS	874.0	889.0
B	QPSK	10.0 MHz 15 kHz SCS	874.0	889.0
C	QPSK	10.0 MHz 15 kHz SCS	874.0	889.0
D	QPSK	10.0 MHz 15 kHz SCS	874.0	889.0
A	QPSK	15.0 MHz 15 kHz SCS	876.5	886.5
B	QPSK	15.0 MHz 15 kHz SCS	876.5	886.5
C	QPSK	15.0 MHz 15 kHz SCS	876.5	886.5
D	QPSK	15.0 MHz 15 kHz SCS	876.5	886.5
A	QPSK	20.0 MHz 15 kHz SCS	879.0	884.0
B	QPSK	20.0 MHz 15 kHz SCS	879.0	884.0
C	QPSK	20.0 MHz 15 kHz SCS	879.0	884.0
D	QPSK	20.0 MHz 15 kHz SCS	879.0	884.0



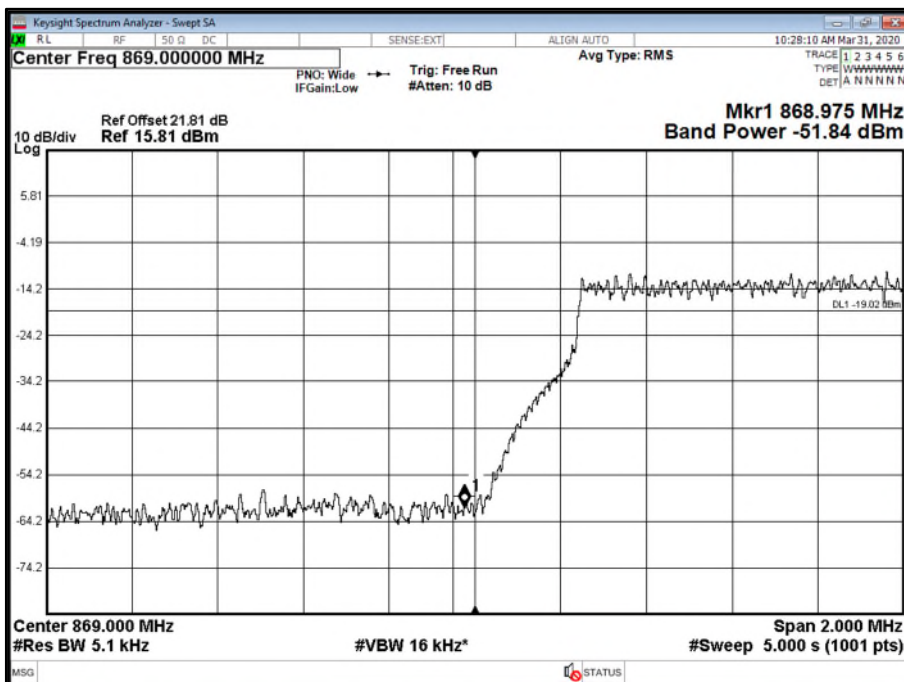


Product Service

Antenna A - NR Modulation QPSK - NR Carrier Bandwidth 5.0 MHz 15 kHz SCS - Channel Position B



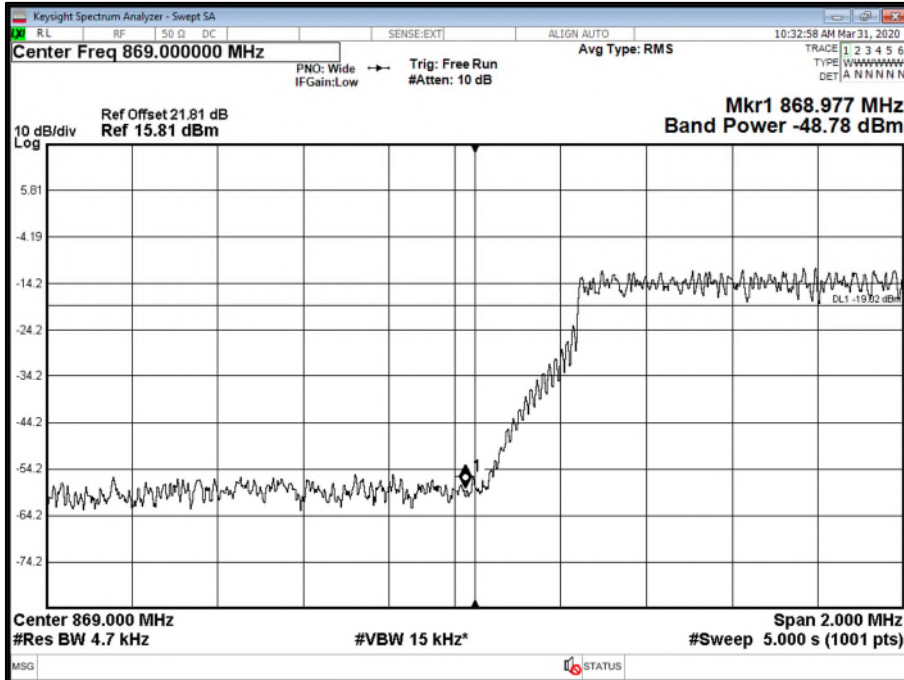
Antenna B - NR Modulation QPSK - NR Carrier Bandwidth 5.0 MHz 15 kHz SCS - Channel Position B



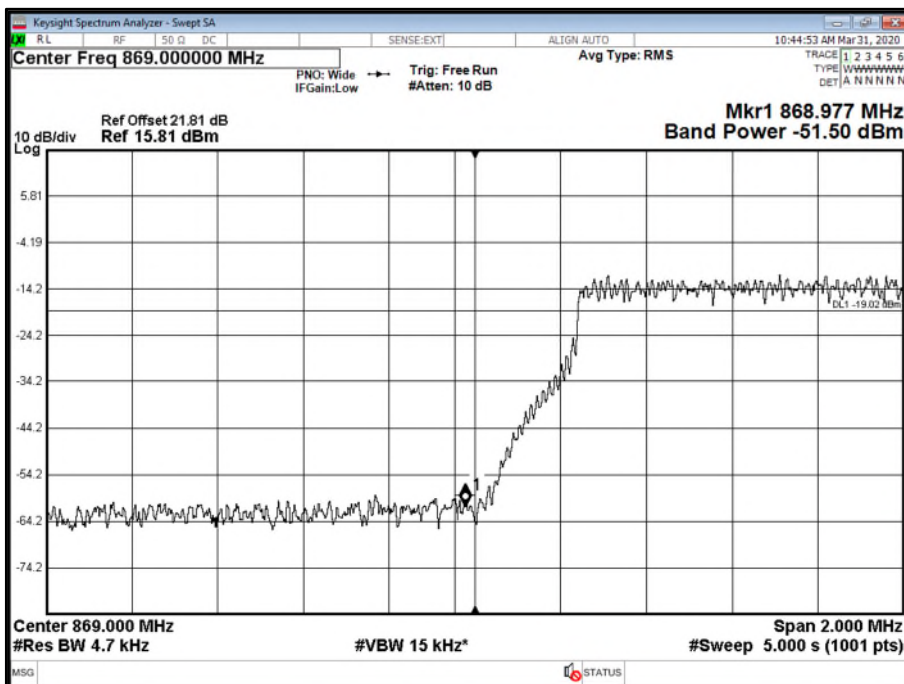


Product Service

Antenna C - NR Modulation QPSK - NR Carrier Bandwidth 5.0 MHz 15 kHz SCS - Channel Position B



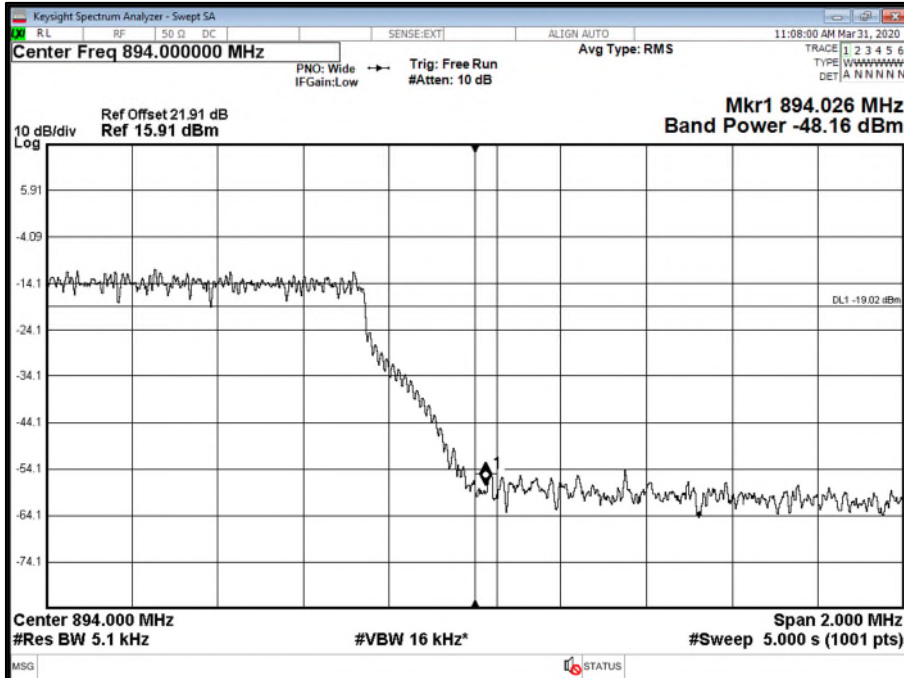
Antenna D - NR Modulation QPSK - NR Carrier Bandwidth 5.0 MHz 15 kHz SCS - Channel Position B



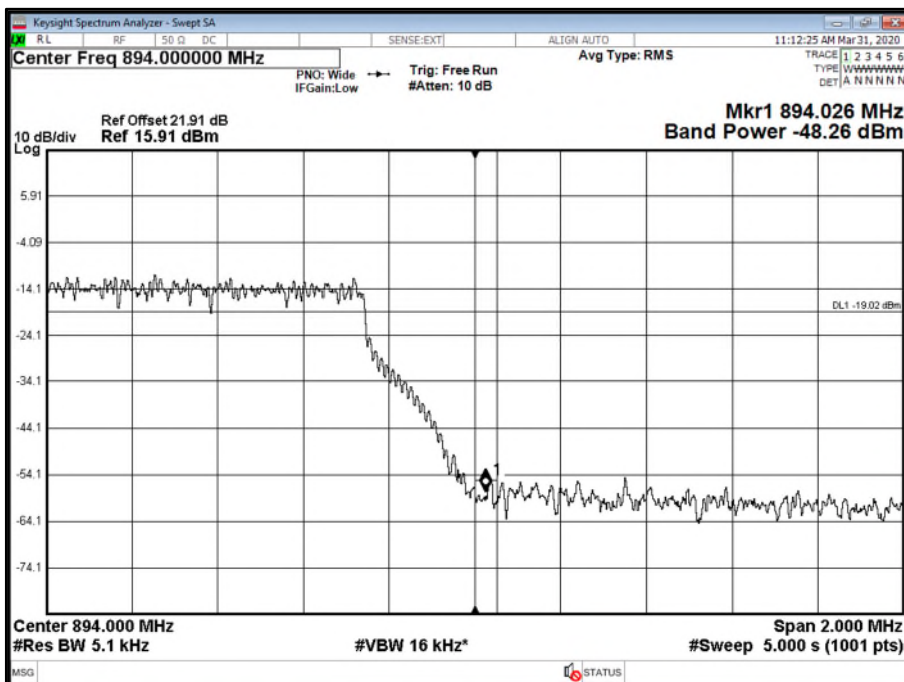


Product Service

Antenna A - NR Modulation QPSK - NR Carrier Bandwidth 5.0 MHz 15 kHz SCS - Channel Position T



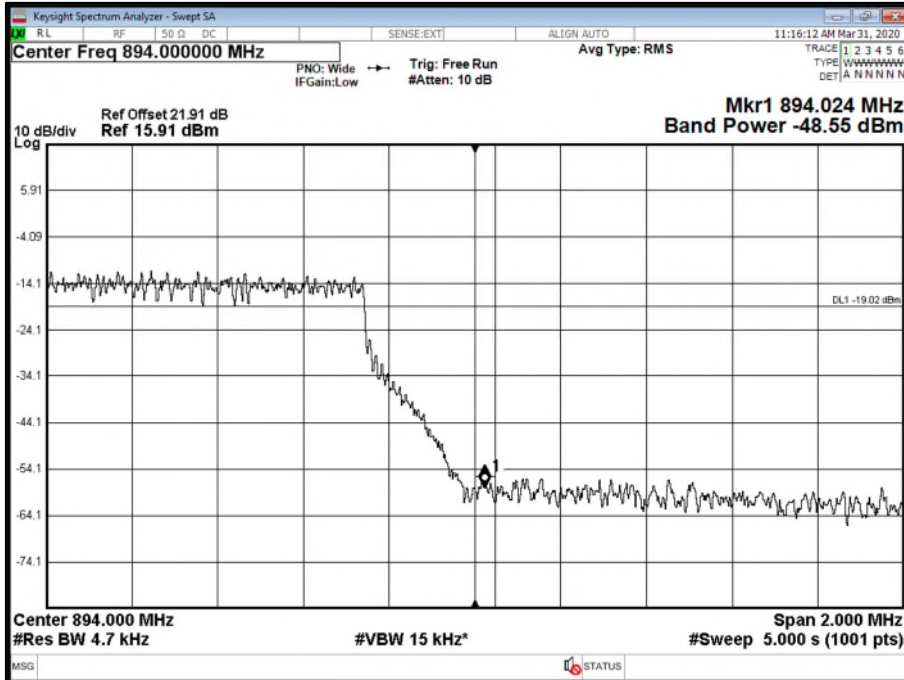
Antenna B - NR Modulation QPSK - NR Carrier Bandwidth 5.0 MHz 15 kHz SCS - Channel Position T



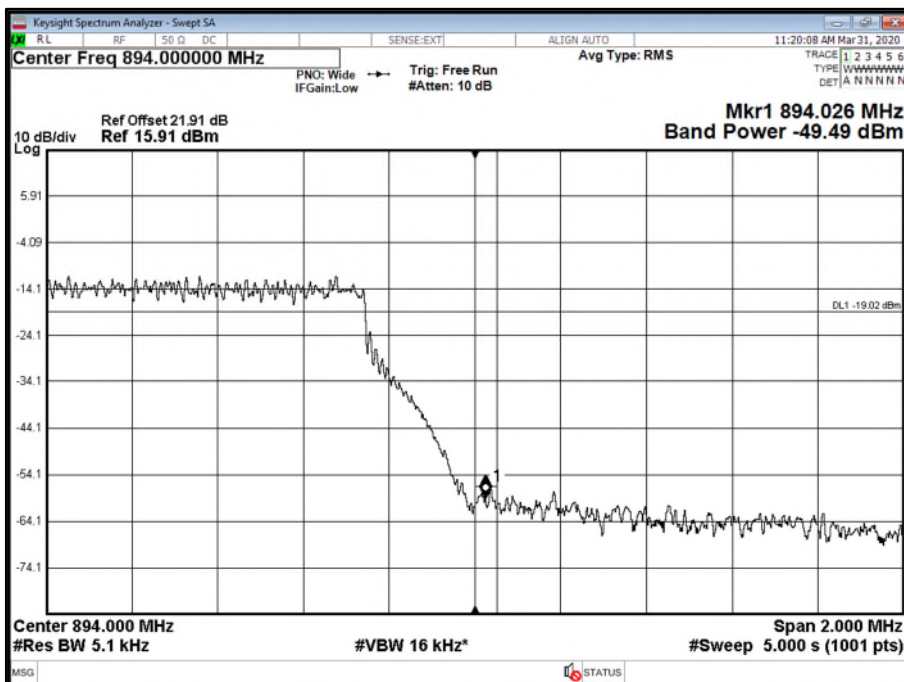


Product Service

Antenna C - NR Modulation QPSK - NR Carrier Bandwidth 5.0 MHz 15 kHz SCS - Channel Position T



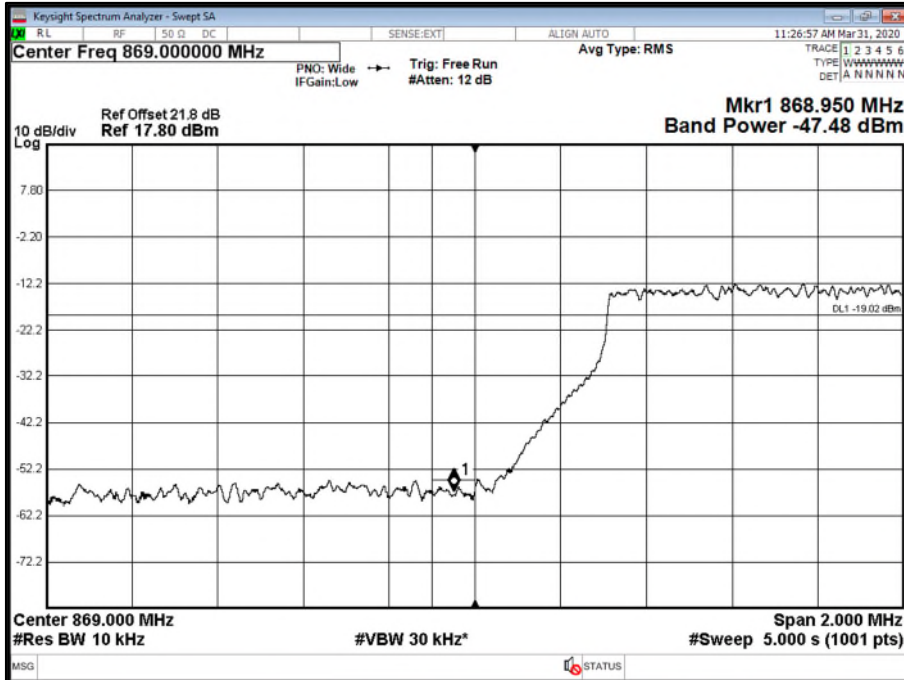
Antenna D - NR Modulation QPSK - NR Carrier Bandwidth 5.0 MHz 15 kHz SCS - Channel Position T



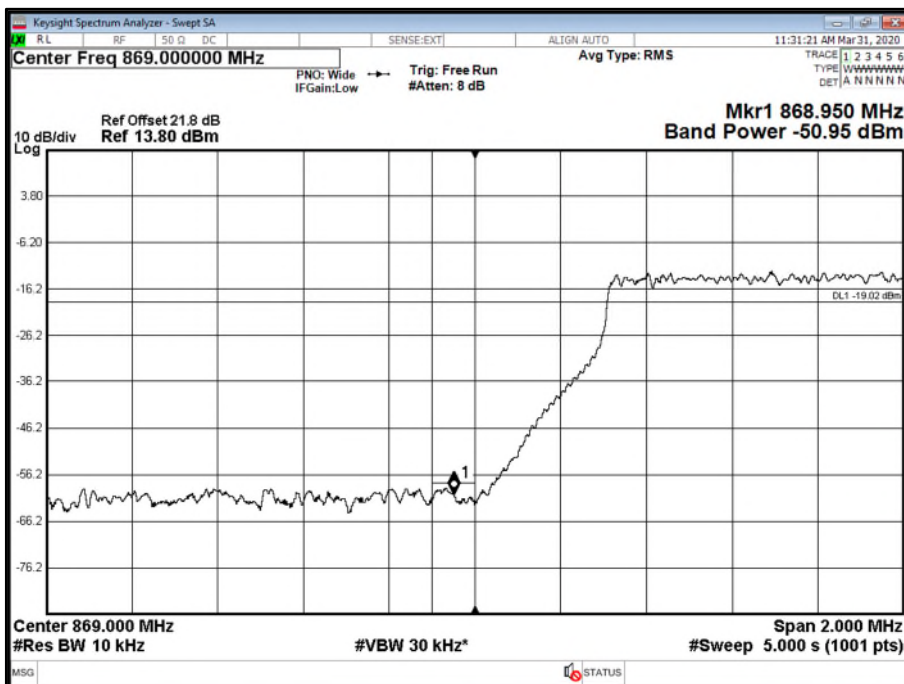


Product Service

Antenna A - NR Modulation QPSK - NR Carrier Bandwidth 10.0 MHz 15 kHz SCS - Channel Position B



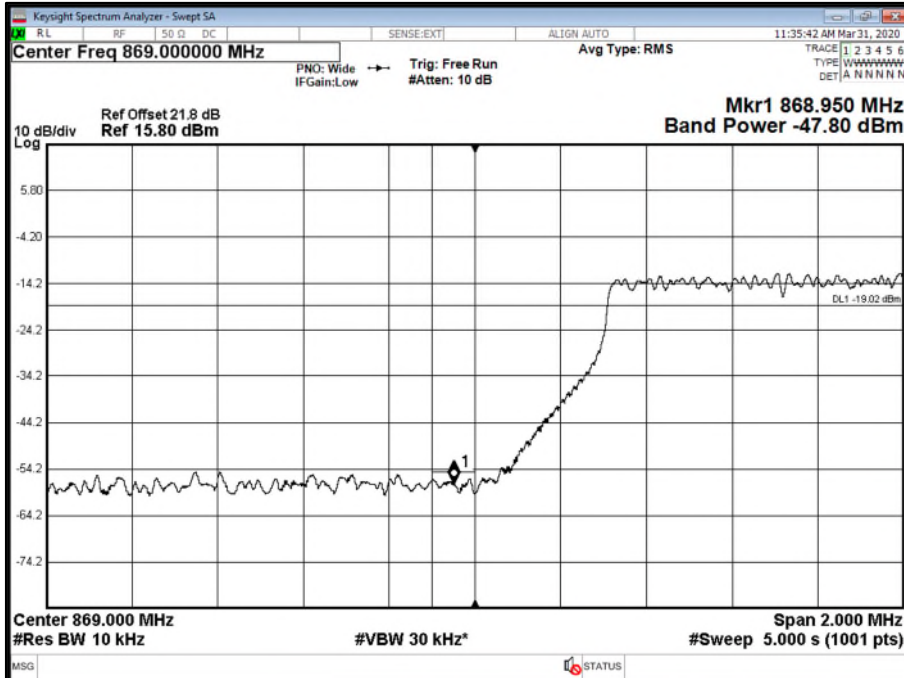
Antenna B - NR Modulation QPSK - NR Carrier Bandwidth 10.0 MHz 15 kHz SCS - Channel Position B



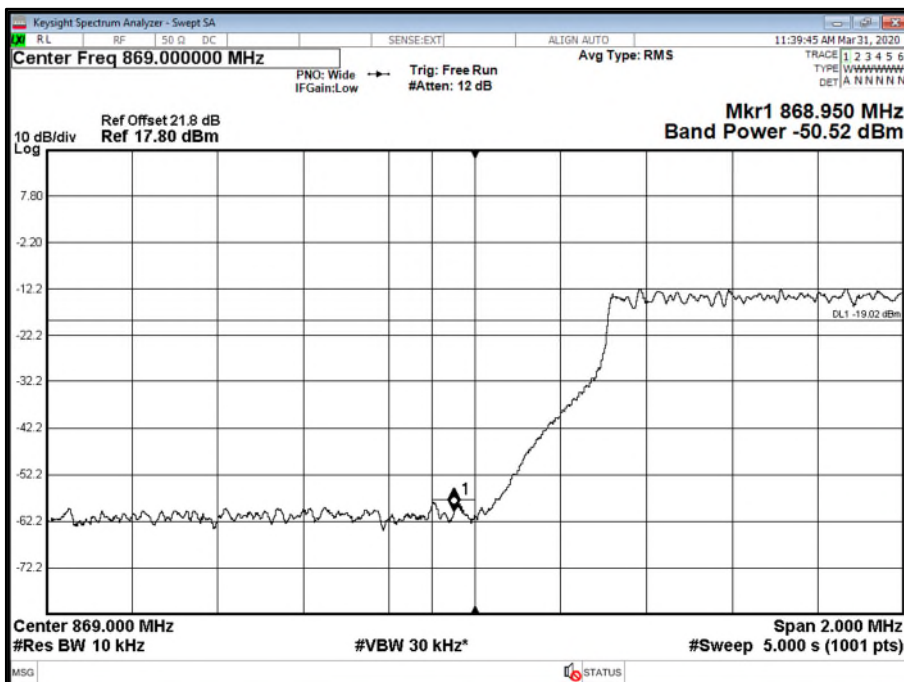


Product Service

Antenna C - NR Modulation QPSK - NR Carrier Bandwidth 10.0 MHz 15 kHz SCS - Channel Position B



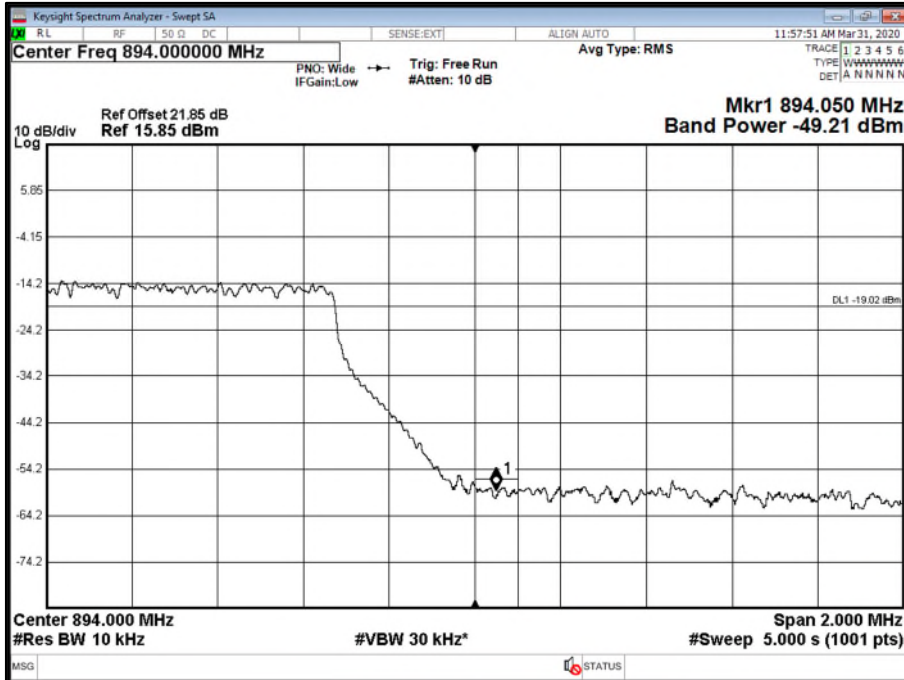
Antenna D - NR Modulation QPSK - NR Carrier Bandwidth 10.0 MHz 15 kHz SCS - Channel Position B



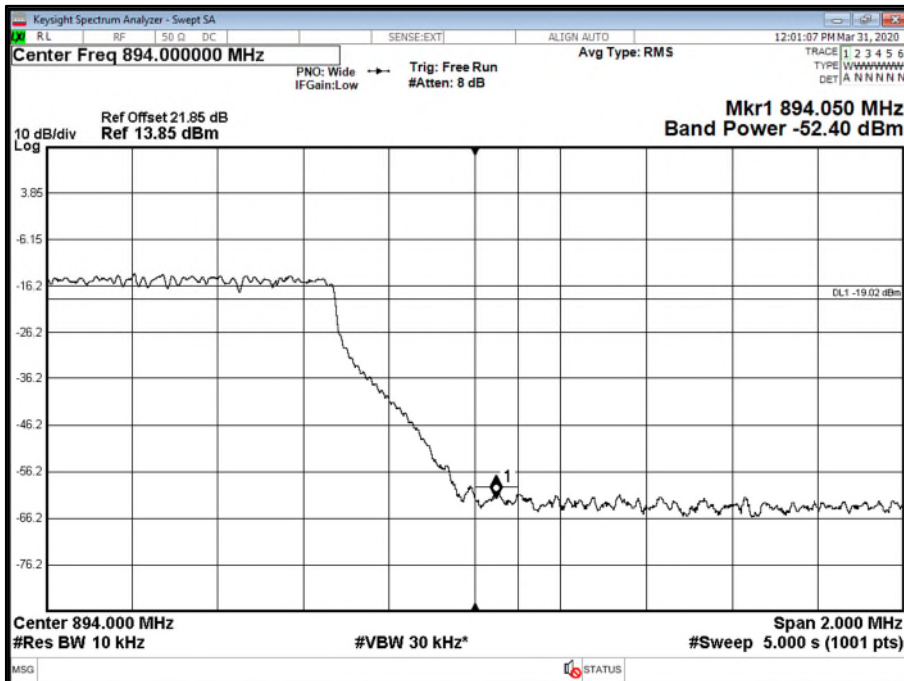


Product Service

Antenna A - NR Modulation QPSK - NR Carrier Bandwidth 10.0 MHz 15 kHz SCS - Channel Position T



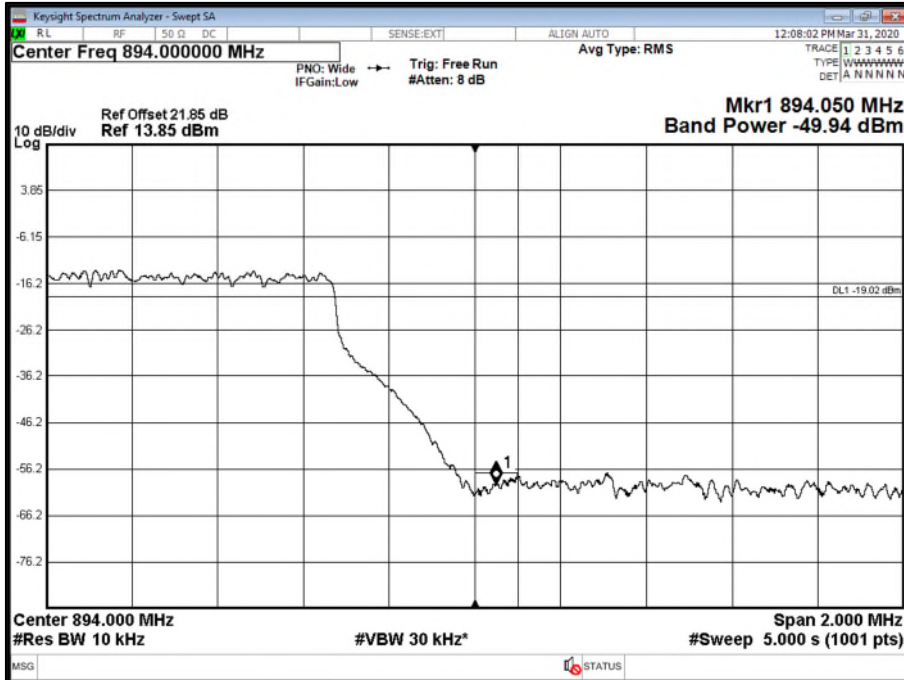
Antenna B - NR Modulation QPSK - NR Carrier Bandwidth 10.0 MHz 15 kHz SCS - Channel Position T



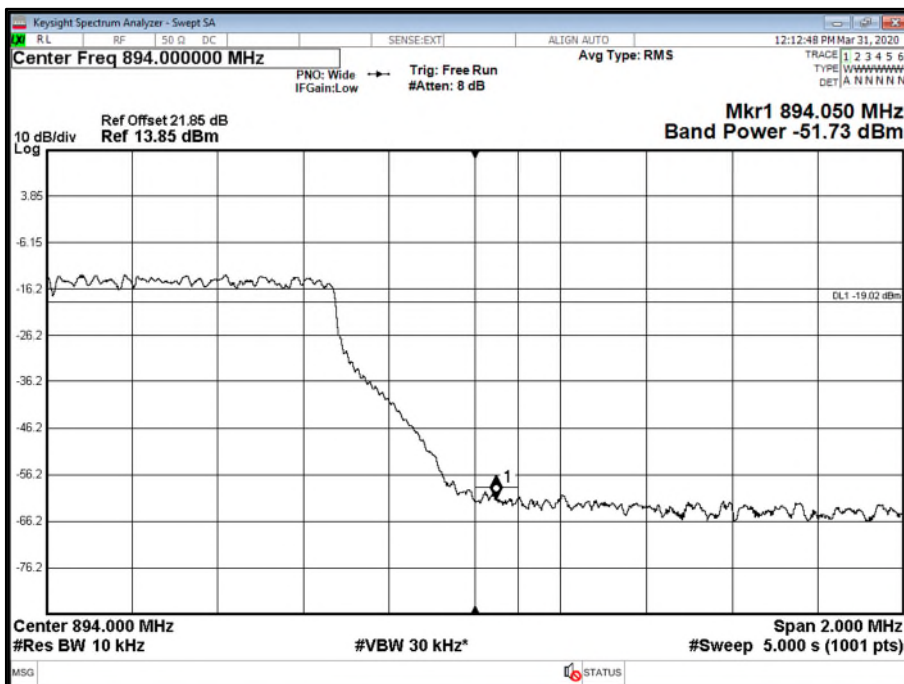


Product Service

Antenna C - NR Modulation QPSK - NR Carrier Bandwidth 10.0 MHz 15 kHz SCS - Channel Position T



Antenna D - NR Modulation QPSK - NR Carrier Bandwidth 10.0 MHz 15 kHz SCS - Channel Position T

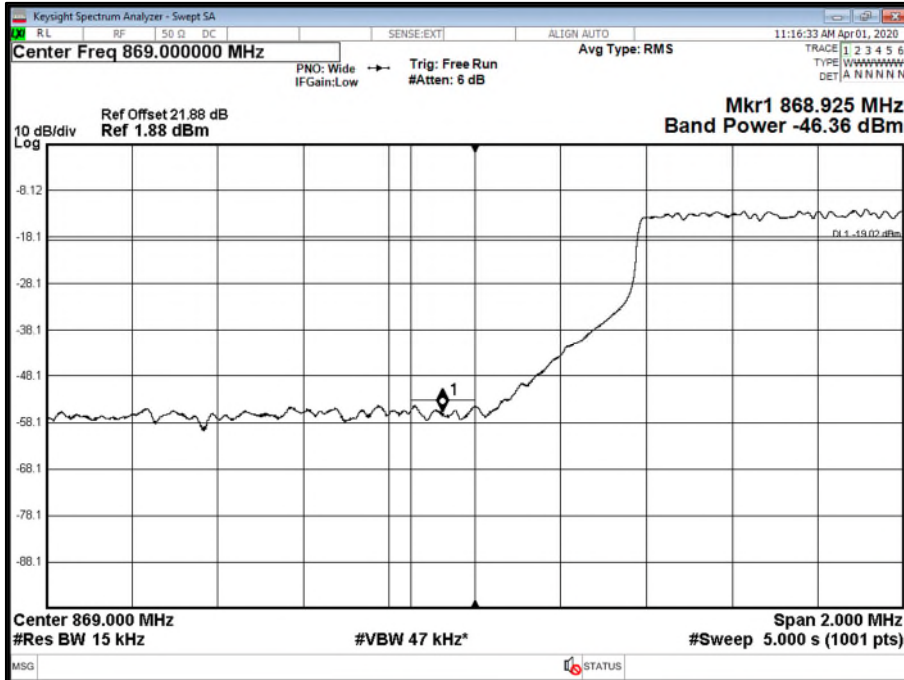




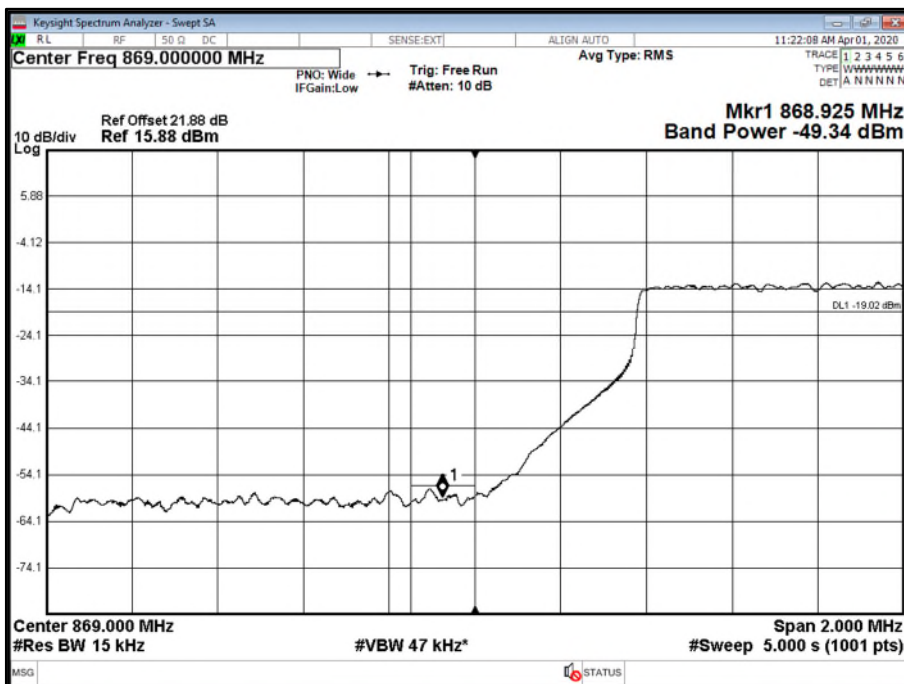


Product Service

Antenna A - NR Modulation QPSK - NR Carrier Bandwidth 15.0 MHz 15 kHz SCS - Channel Position B



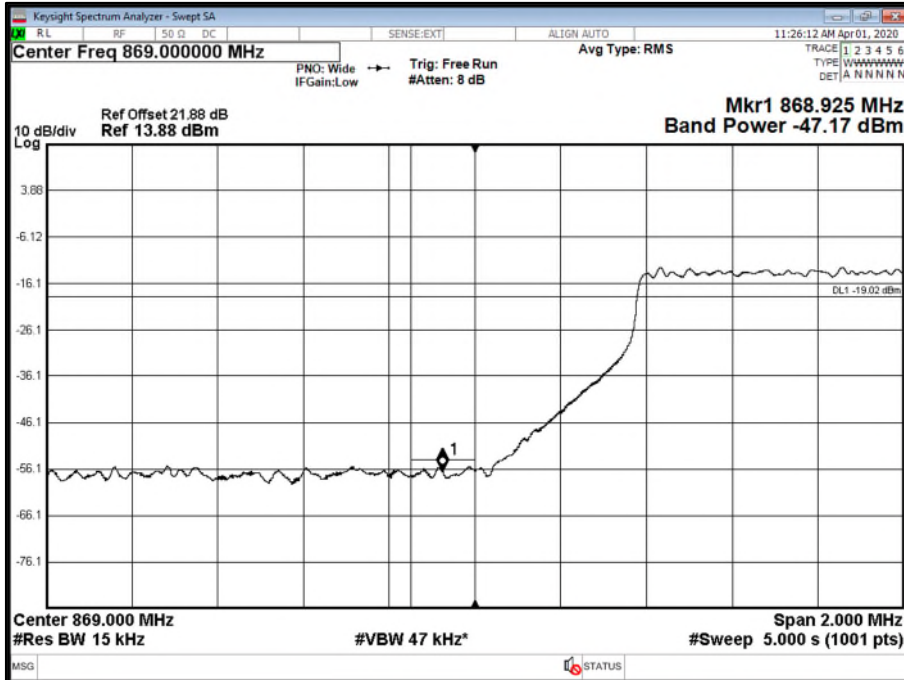
Antenna B - NR Modulation QPSK - NR Carrier Bandwidth 15.0 MHz 15 kHz SCS - Channel Position B



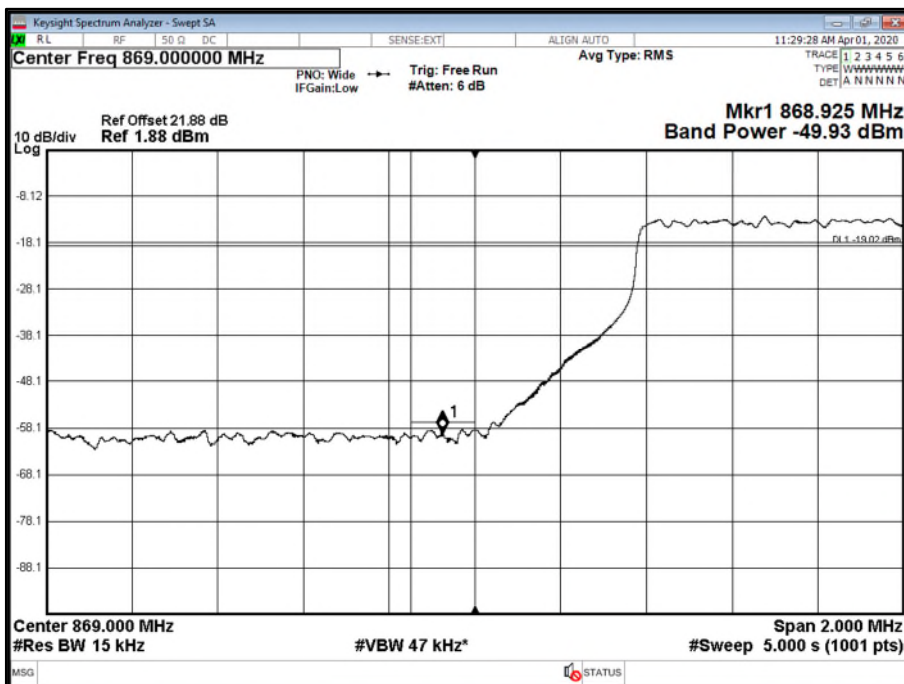


Product Service

Antenna C - NR Modulation QPSK - NR Carrier Bandwidth 15.0 MHz 15 kHz SCS - Channel Position B



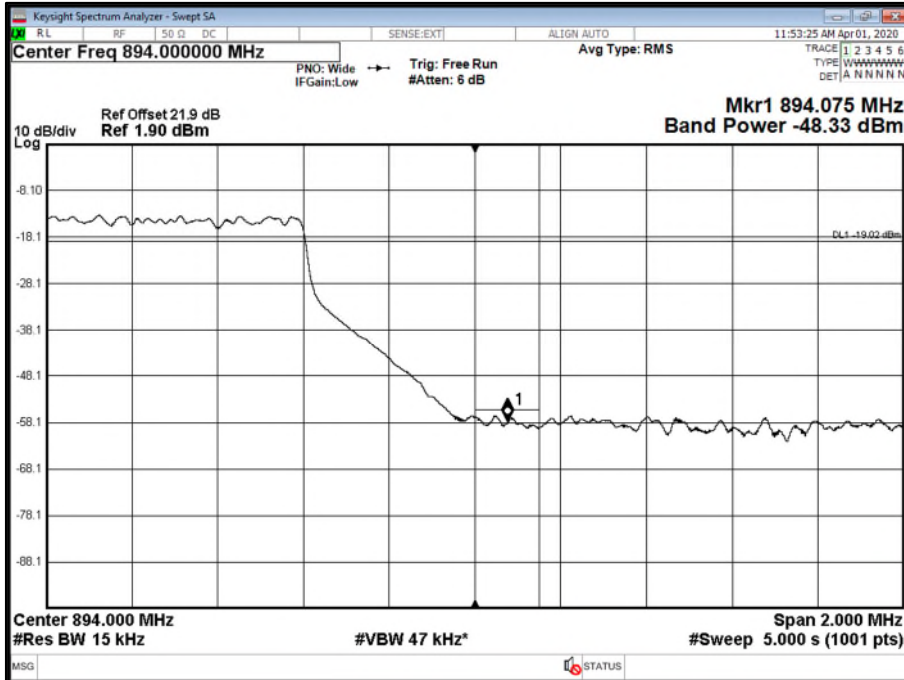
Antenna D - NR Modulation QPSK - NR Carrier Bandwidth 15.0 MHz 15 kHz SCS - Channel Position B



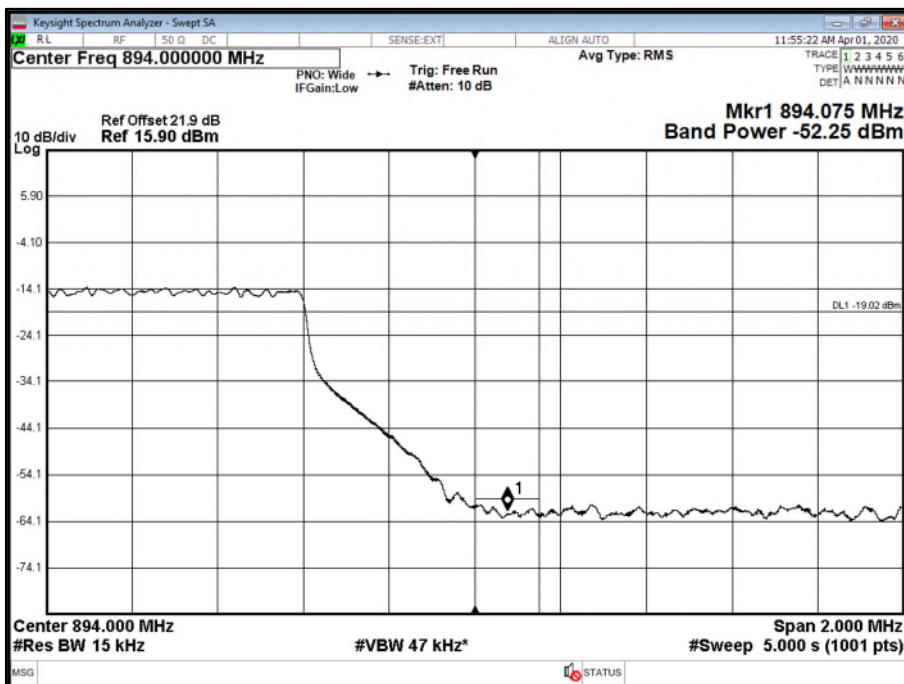


Product Service

Antenna A - NR Modulation QPSK - NR Carrier Bandwidth 15.0 MHz 15 kHz SCS - Channel Position T



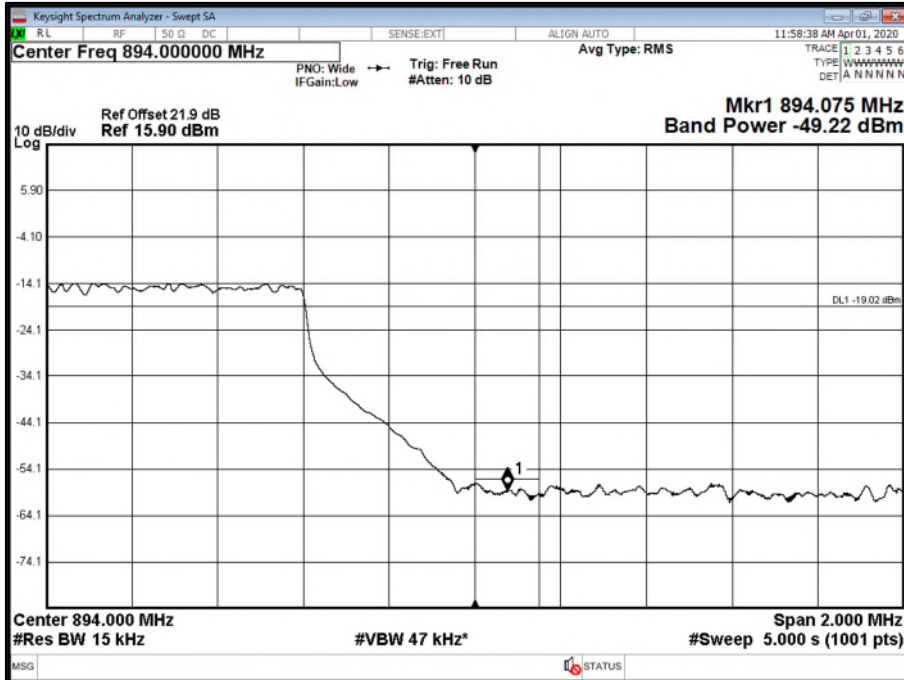
Antenna B - NR Modulation QPSK - NR Carrier Bandwidth 15.0 MHz 15 kHz SCS - Channel Position T



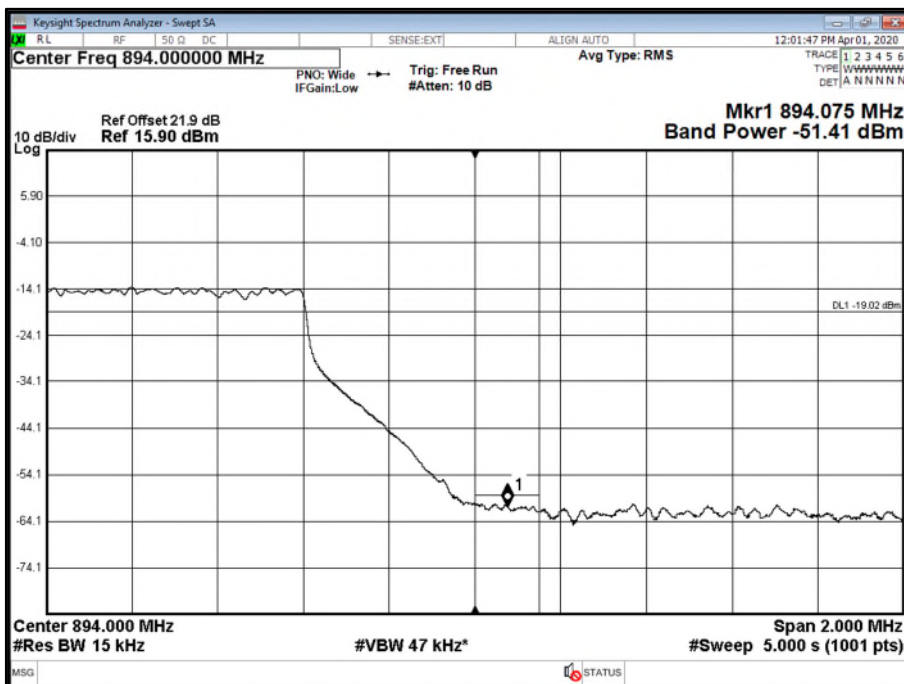


Product Service

Antenna C - NR Modulation QPSK - NR Carrier Bandwidth 15.0 MHz 15 kHz SCS - Channel Position T



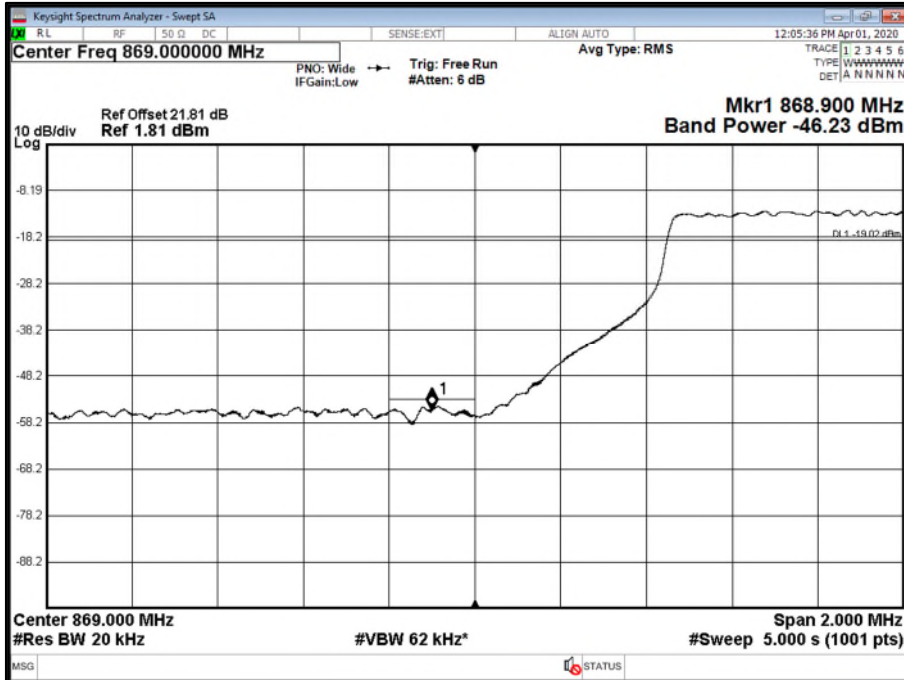
Antenna D - NR Modulation QPSK - NR Carrier Bandwidth 15.0 MHz 15 kHz SCS - Channel Position T



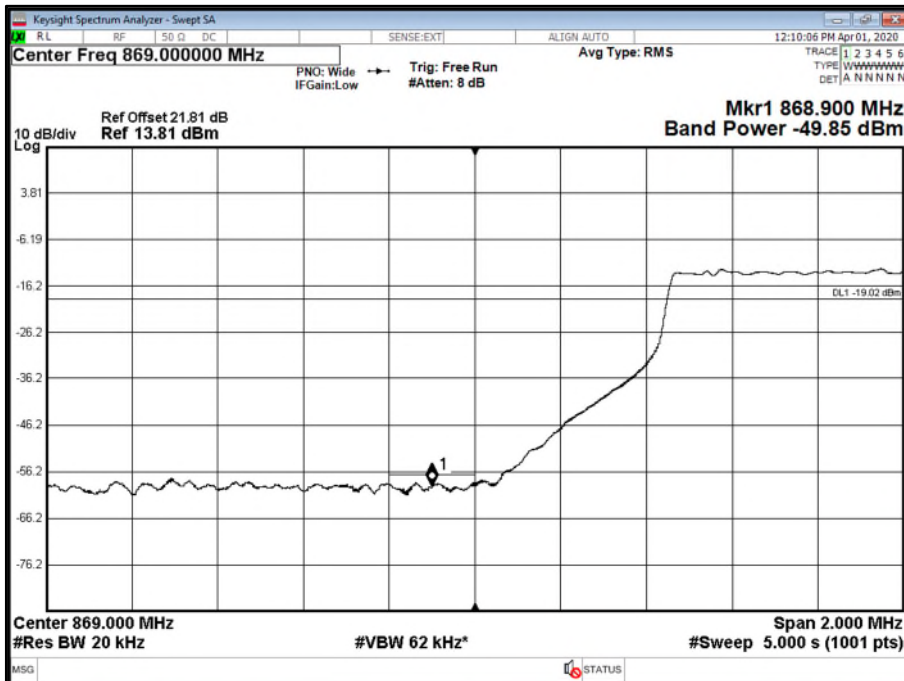


Product Service

Antenna A - NR Modulation QPSK - NR Carrier Bandwidth 20.0 MHz 15 kHz SCS - Channel Position B



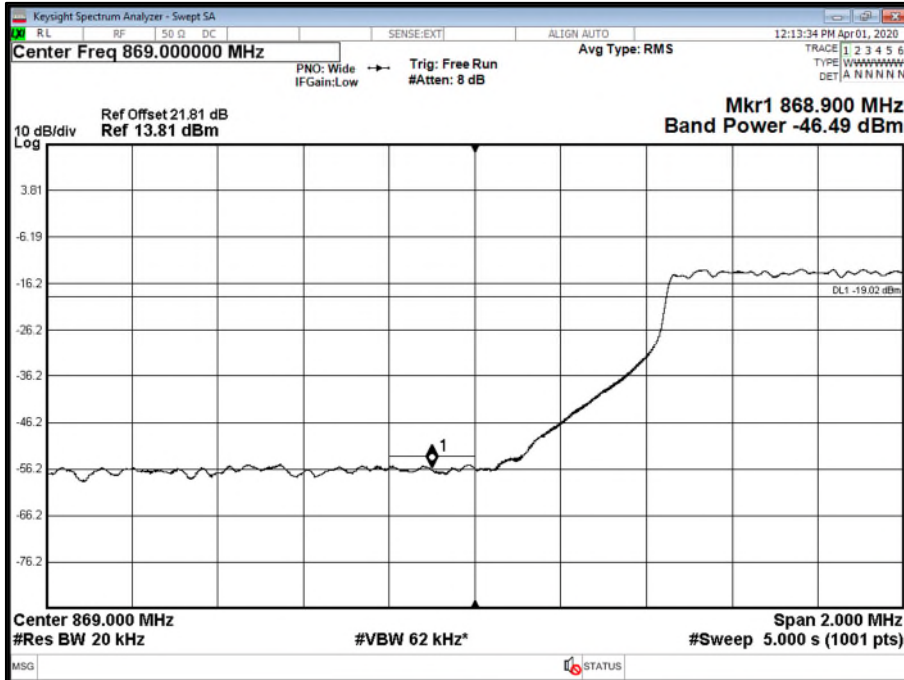
Antenna B - NR Modulation QPSK - NR Carrier Bandwidth 20.0 MHz 15 kHz SCS - Channel Position B



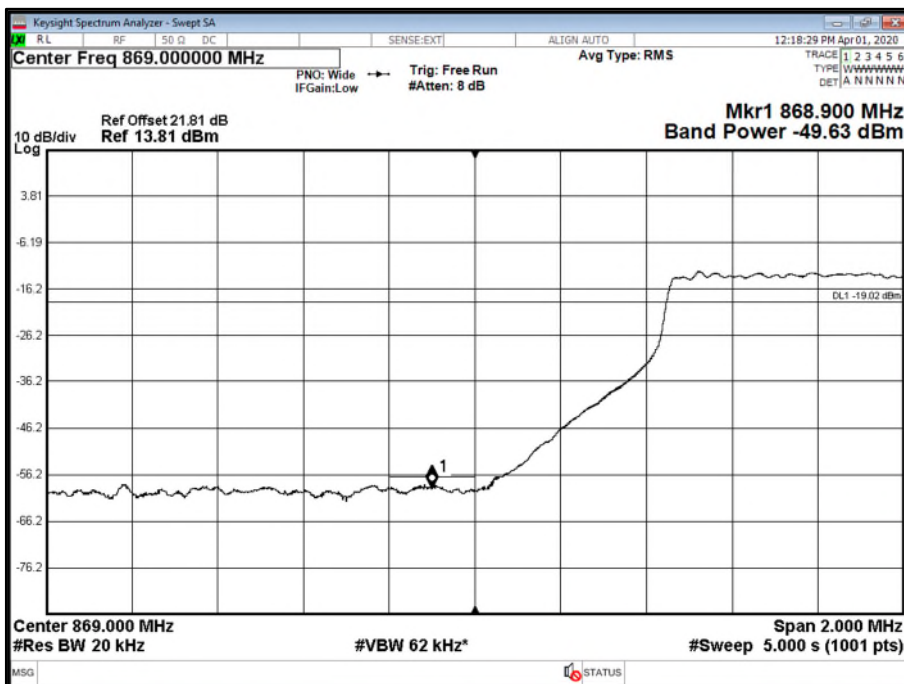


Product Service

Antenna C - NR Modulation QPSK - NR Carrier Bandwidth 20.0 MHz 15 kHz SCS - Channel Position B



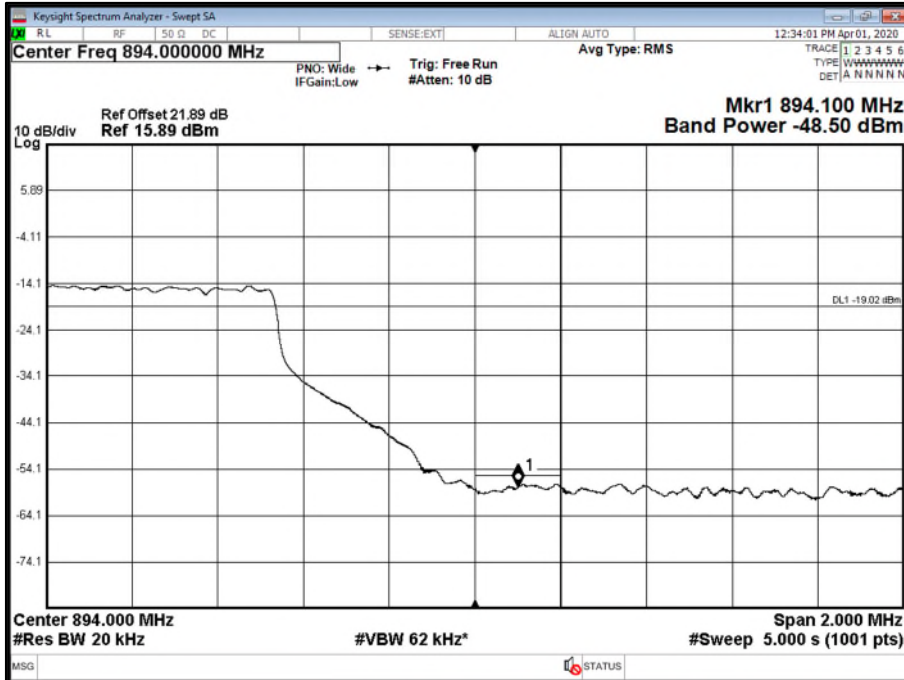
Antenna D - NR Modulation QPSK - NR Carrier Bandwidth 20.0 MHz 15 kHz SCS - Channel Position B



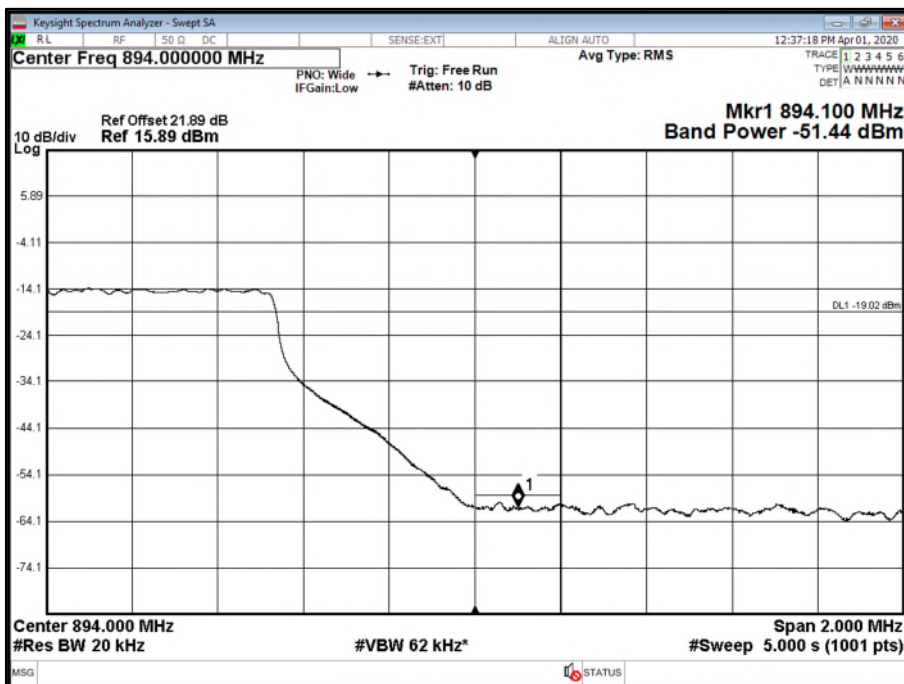


Product Service

Antenna A - NR Modulation QPSK - NR Carrier Bandwidth 20.0 MHz 15 kHz SCS - Channel Position T



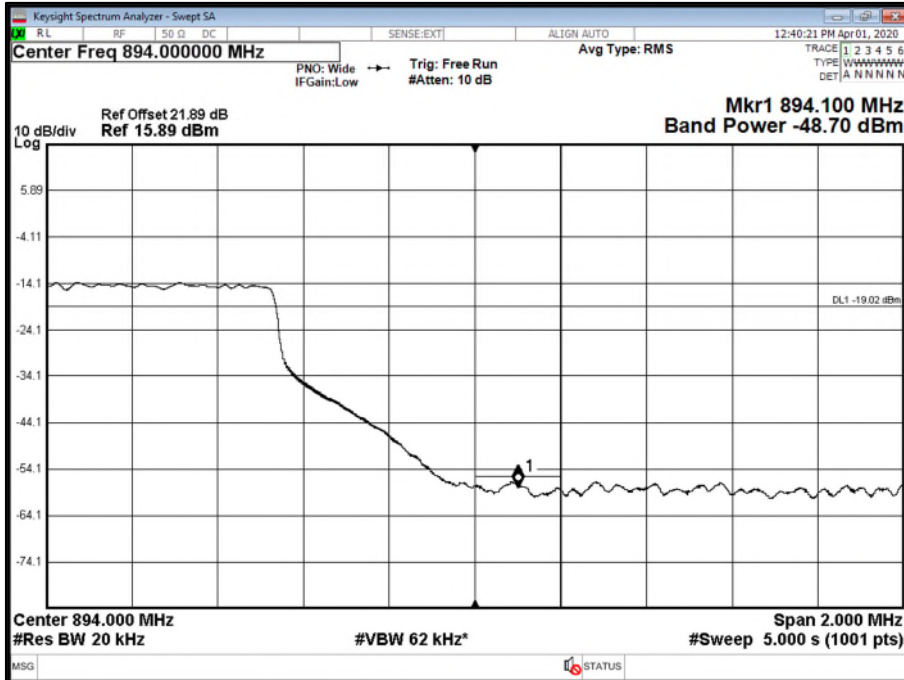
Antenna B - NR Modulation QPSK - NR Carrier Bandwidth 20.0 MHz 15 kHz SCS - Channel Position T



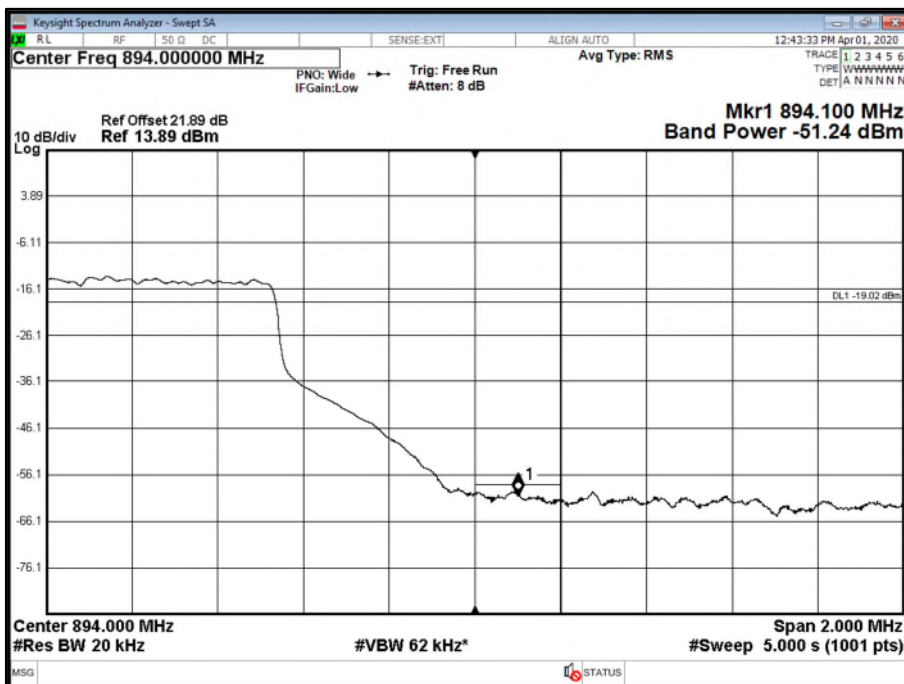


Product Service

Antenna C - NR Modulation QPSK - NR Carrier Bandwidth 20.0 MHz 15 kHz SCS - Channel Position T



Antenna D - NR Modulation QPSK - NR Carrier Bandwidth 20.0 MHz 15 kHz SCS - Channel Position T







Product Service

Configuration D

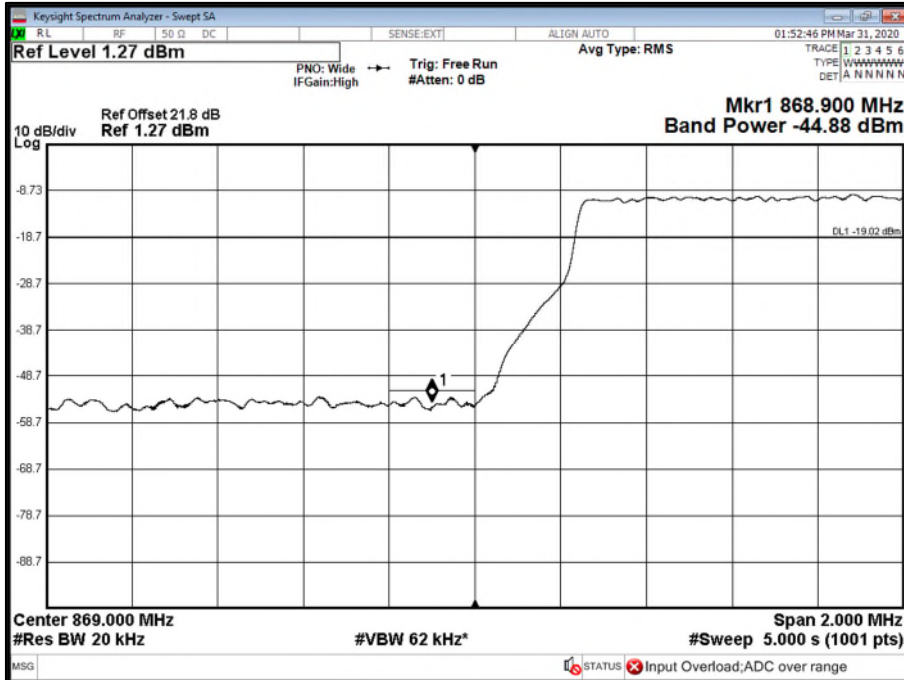
Maximum Output Power 17.0 dBm per port

Antenna	NR Modulation	NR Carrier Bandwidth	Band Edge (MHz)	
			Channel Position B	Channel Position T
A	QPSK	5.0+5.0 MHz 15 kHz SCS	871.5 + 876.5	886.5 + 891.5
A	QPSK	10.0 +10.0 MHz 15 kHz SCS	874.0 +884.0	879.0 + 889.0
B	QPSK	5.0+5.0 MHz 15 kHz SCS	871.5 + 876.5	886.5 + 891.5
B	QPSK	10.0 +10.0 MHz 15 kHz SCS	874.0 +884.0	879.0 + 889.0
C	QPSK	5.0+5.0 MHz 15 kHz SCS	871.5 + 876.5	886.5 + 891.5
C	QPSK	10.0 +10.0 MHz 15 kHz SCS	874.0 +884.0	879.0 + 889.0
D	QPSK	5.0+5.0 MHz 15 kHz SCS	871.5 + 876.5	886.5 + 891.5
D	QPSK	10.0 +10.0 MHz 15 kHz SCS	874.0 +884.0	879.0 + 889.0

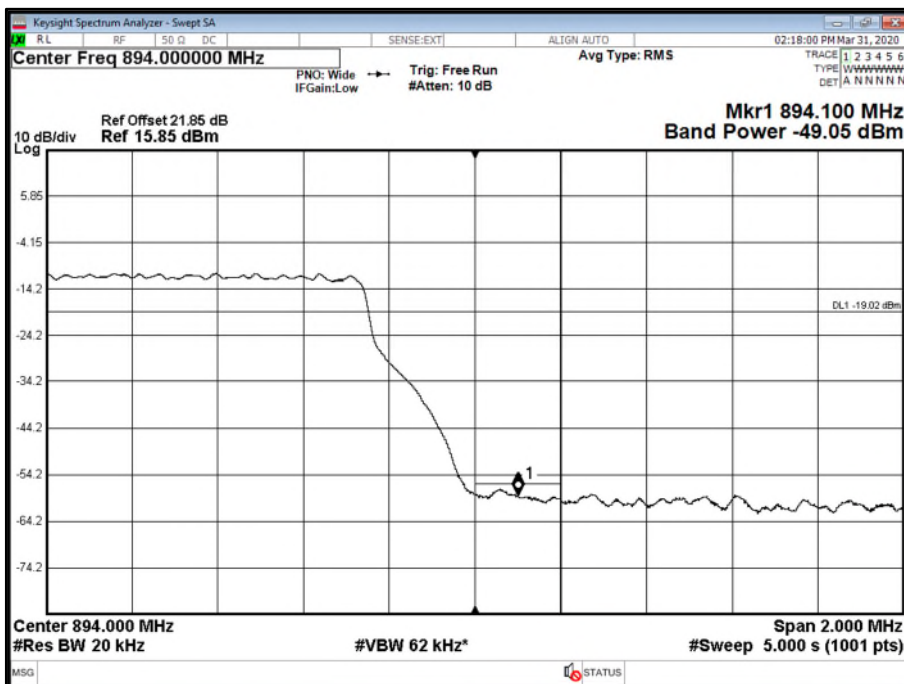


Product Service

Antenna A - NR Modulation QPSK - NR Carrier Bandwidth 5.0+5.0 MHz 15 kHz SCS - Channel Position B



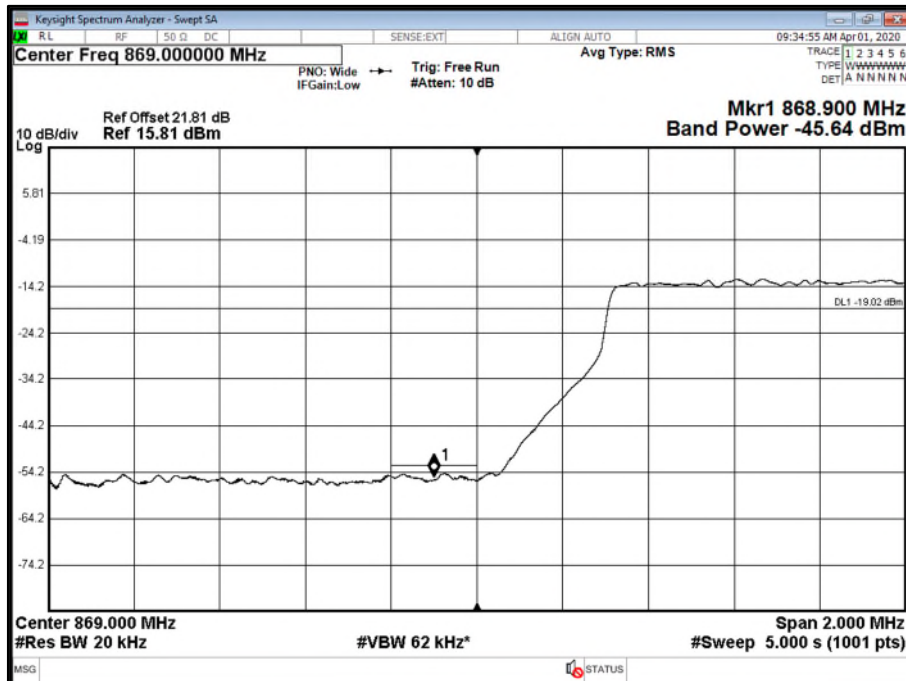
Antenna A - NR Modulation QPSK - NR Carrier Bandwidth 5.0+5.0 MHz 15 kHz SCS - Channel Position T



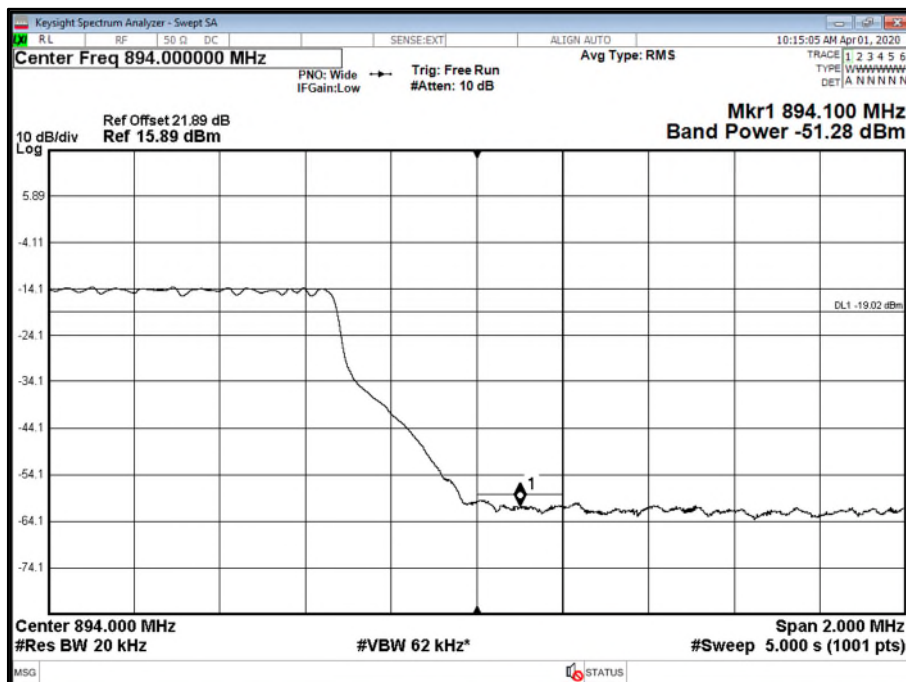


Product Service

Antenna A - NR Modulation QPSK - NR Carrier Bandwidth 10.0+10.0 MHz 15 kHz SCS - Channel Position B



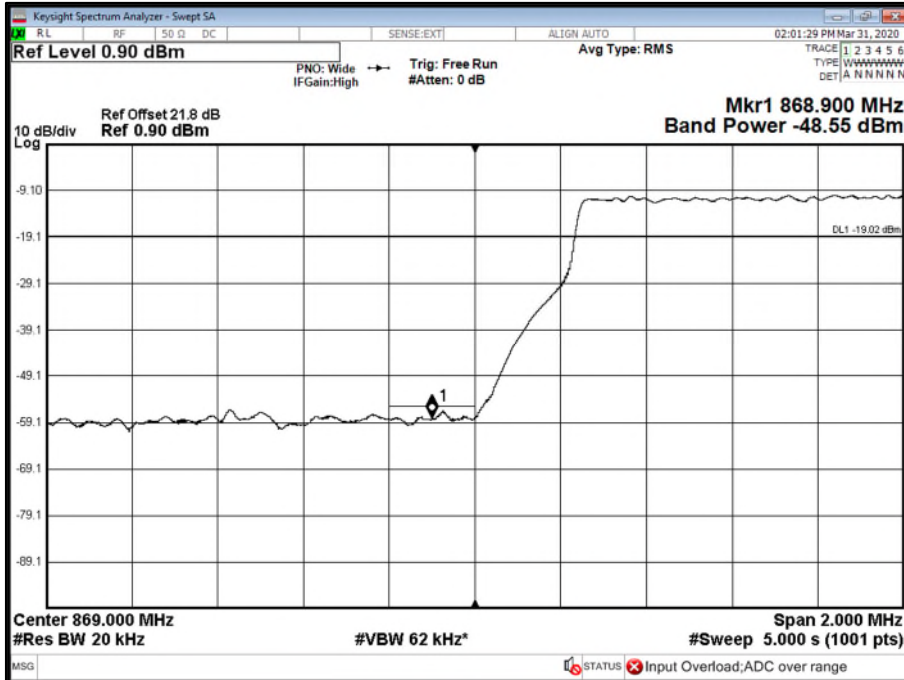
Antenna A - NR Modulation QPSK - NR Carrier Bandwidth 10.0+10.0 MHz 15 kHz SCS - Channel Position T



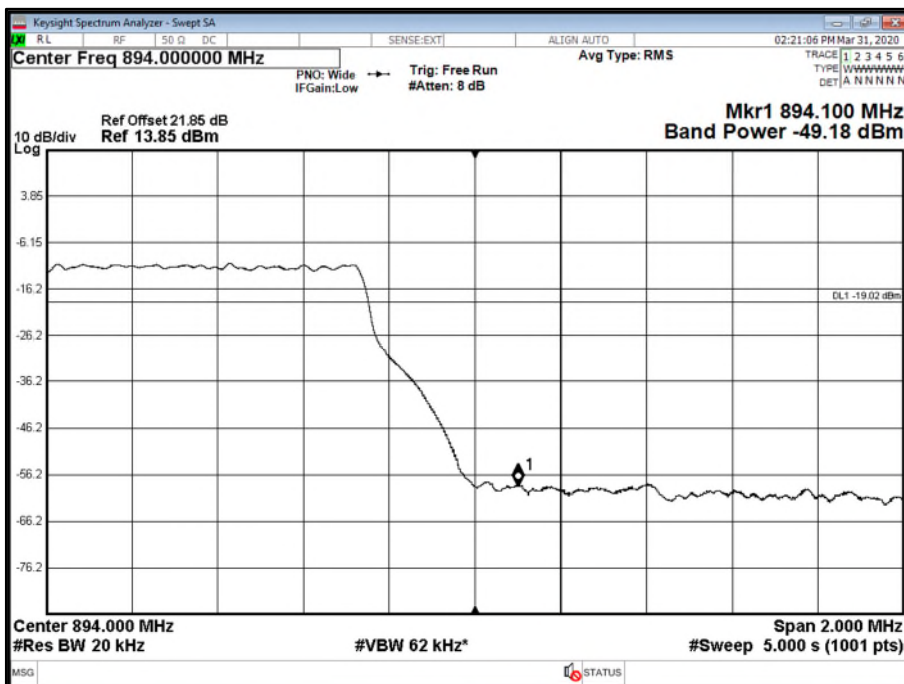


Product Service

Antenna B - NR Modulation QPSK - NR Carrier Bandwidth 5.0+5.0 MHz 15 kHz SCS - Channel Position B



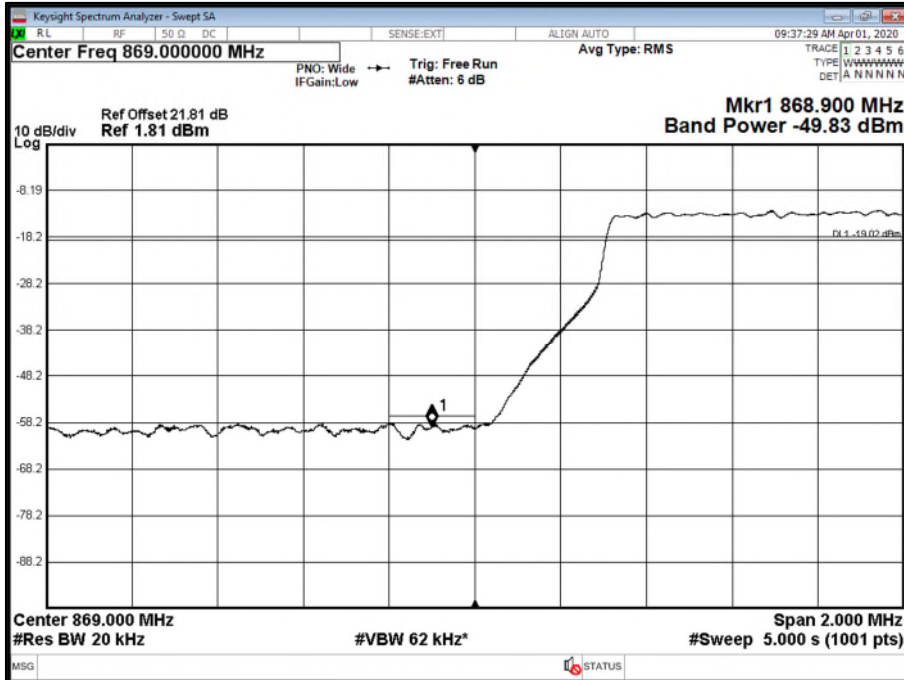
Antenna B - NR Modulation QPSK - NR Carrier Bandwidth 5.0+5.0 MHz 15 kHz SCS - Channel Position T



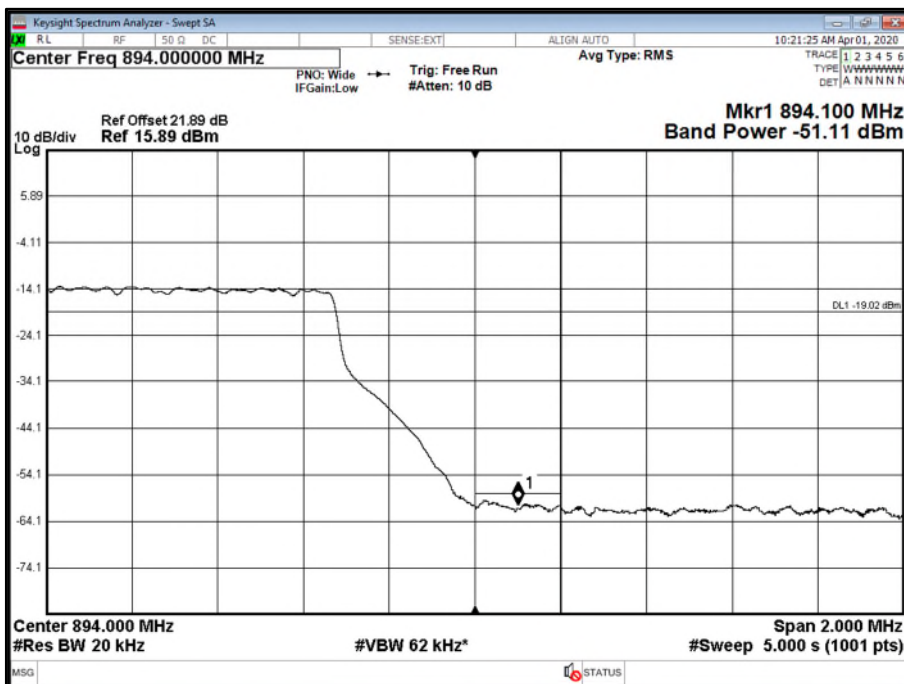


Product Service

Antenna B - NR Modulation QPSK - NR Carrier Bandwidth 10.0+10.0 MHz 15 kHz SCS - Channel Position B



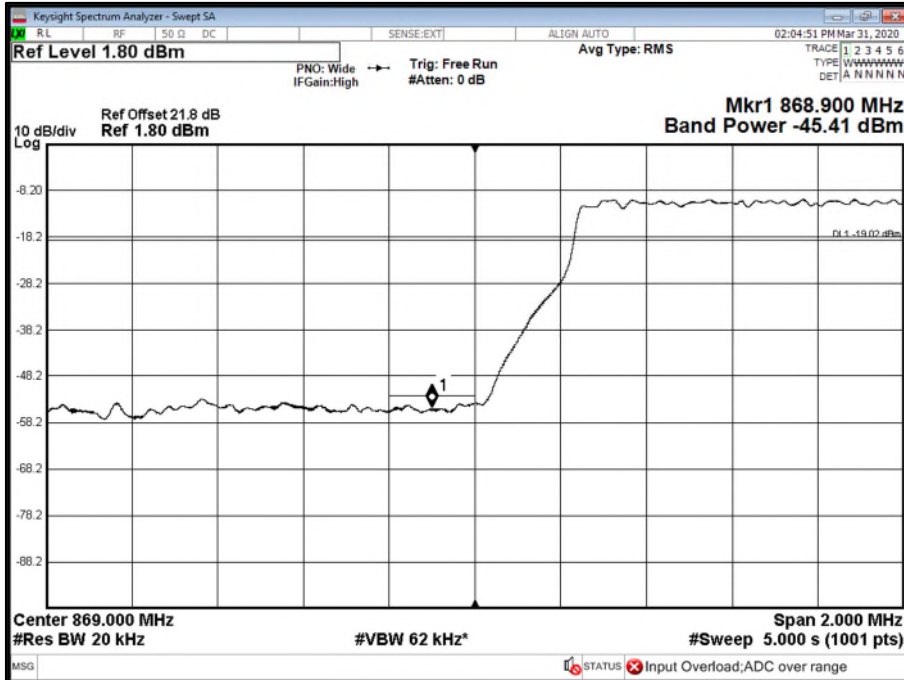
Antenna B - NR Modulation QPSK - NR Carrier Bandwidth 10.0+10.0 MHz 15 kHz SCS - Channel Position T



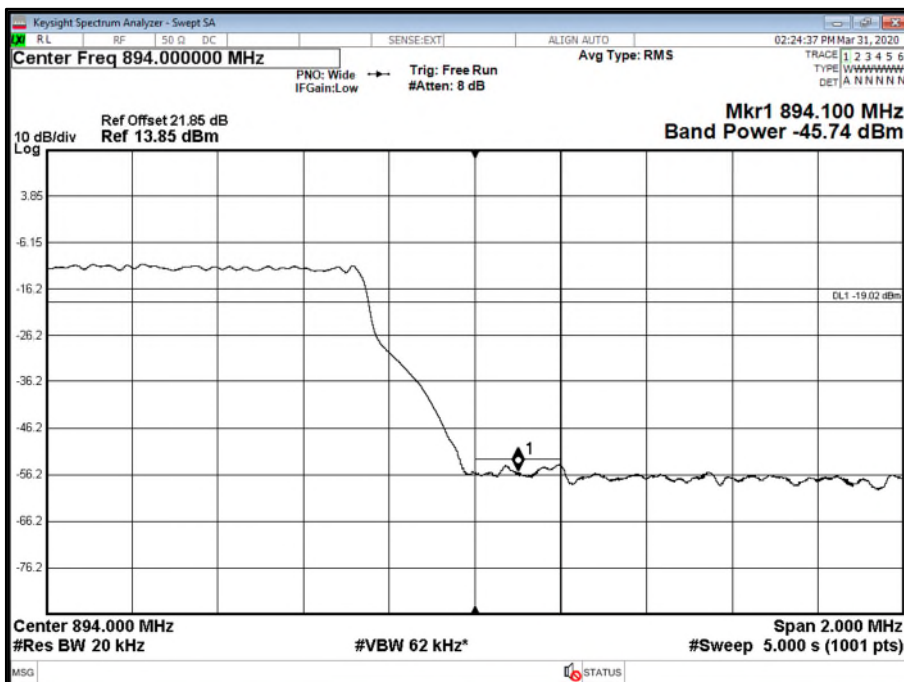


Product Service

Antenna C - NR Modulation QPSK - NR Carrier Bandwidth 5.0+5.0 MHz 15 kHz SCS - Channel Position B



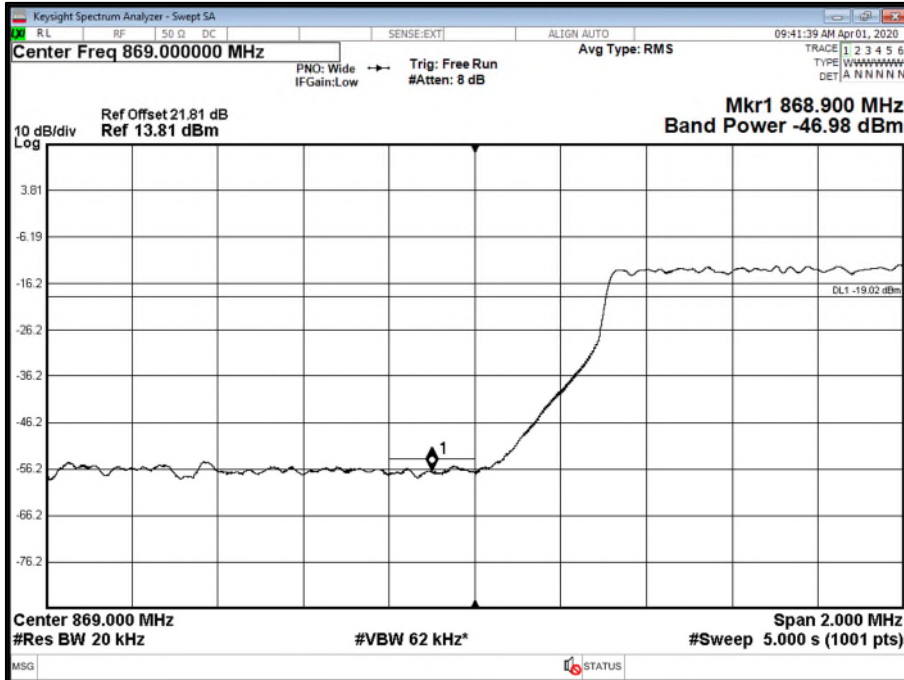
Antenna C - NR Modulation QPSK - NR Carrier Bandwidth 5.0+5.0 MHz 15 kHz SCS - Channel Position T



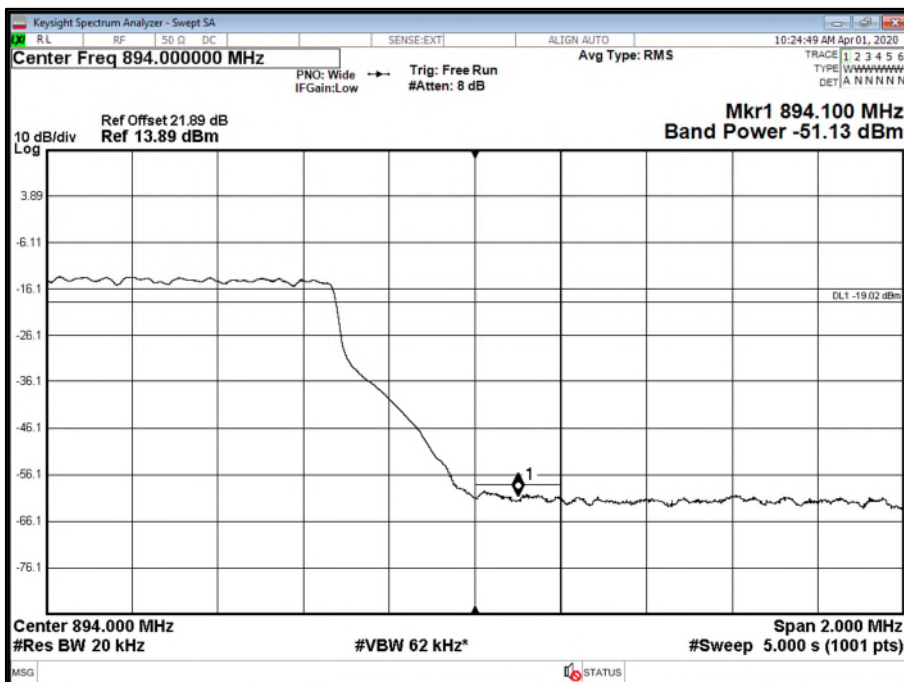


Product Service

Antenna C - NR Modulation QPSK - NR Carrier Bandwidth 10.0+10.0 MHz 15 kHz SCS - Channel Position B



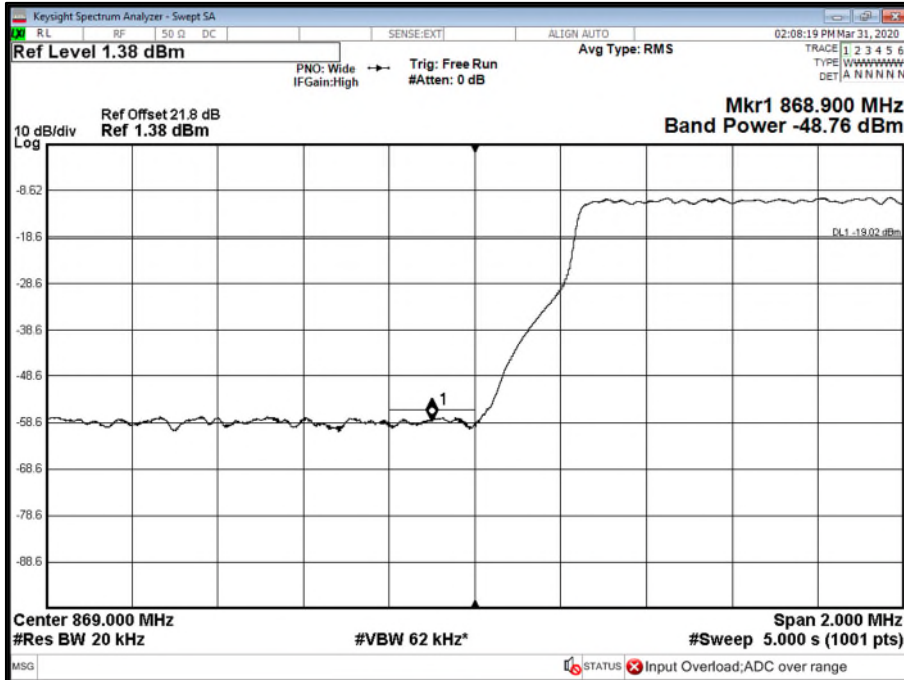
Antenna C - NR Modulation QPSK - NR Carrier Bandwidth 10.0+10.0 MHz 15 kHz SCS - Channel Position T





Product Service

Antenna D - NR Modulation QPSK - NR Carrier Bandwidth 5.0+5.0 MHz 15 kHz SCS - Channel Position B



Antenna D - NR Modulation QPSK - NR Carrier Bandwidth 5.0+5.0 MHz 15 kHz SCS - Channel Position T

