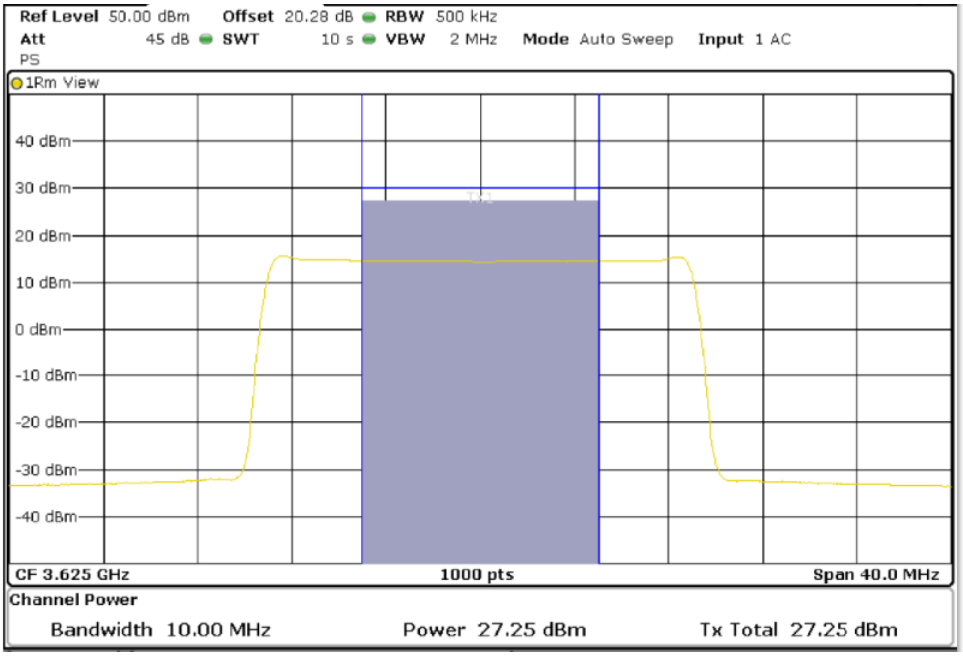
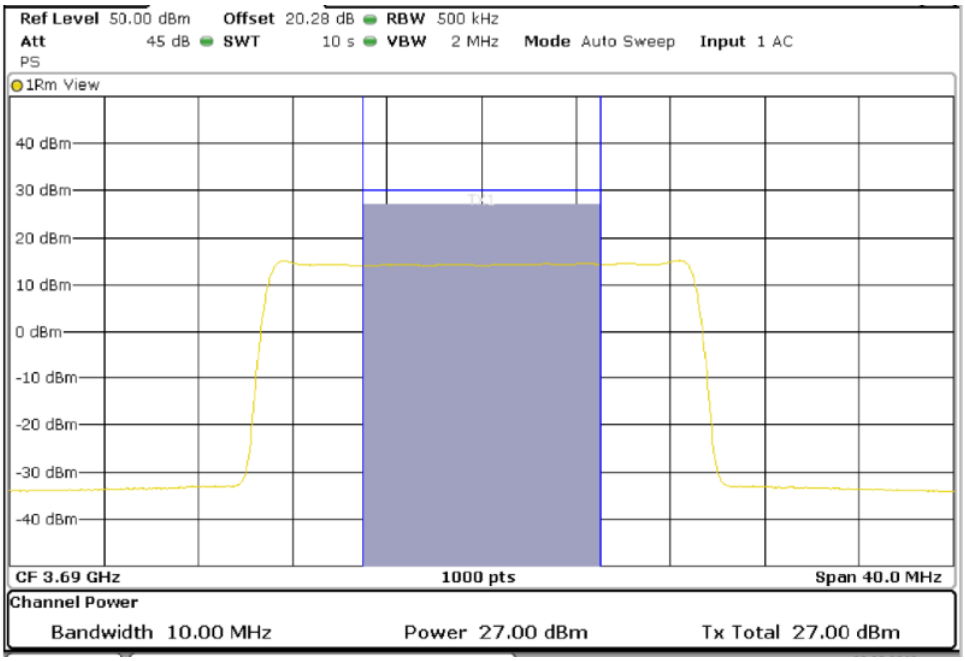
TEST RESULTS (Cont.):	

Middle Channel (3625 MHz)



Highest Channel (3690 MHz)



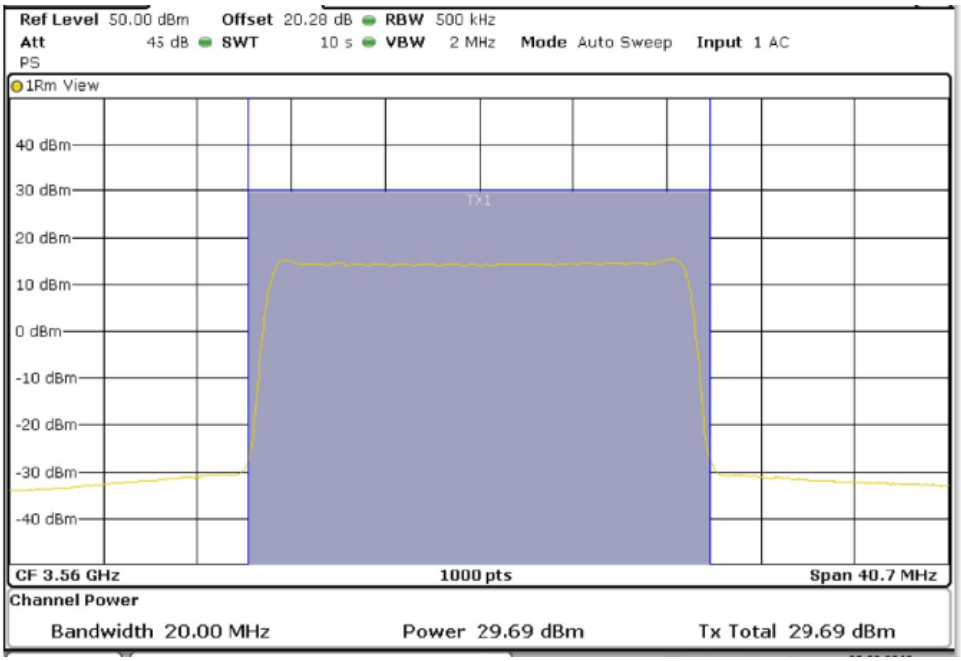
TEST RESULTS (Cont.):	20MHz BW Reference only

20MHz BW Reference only

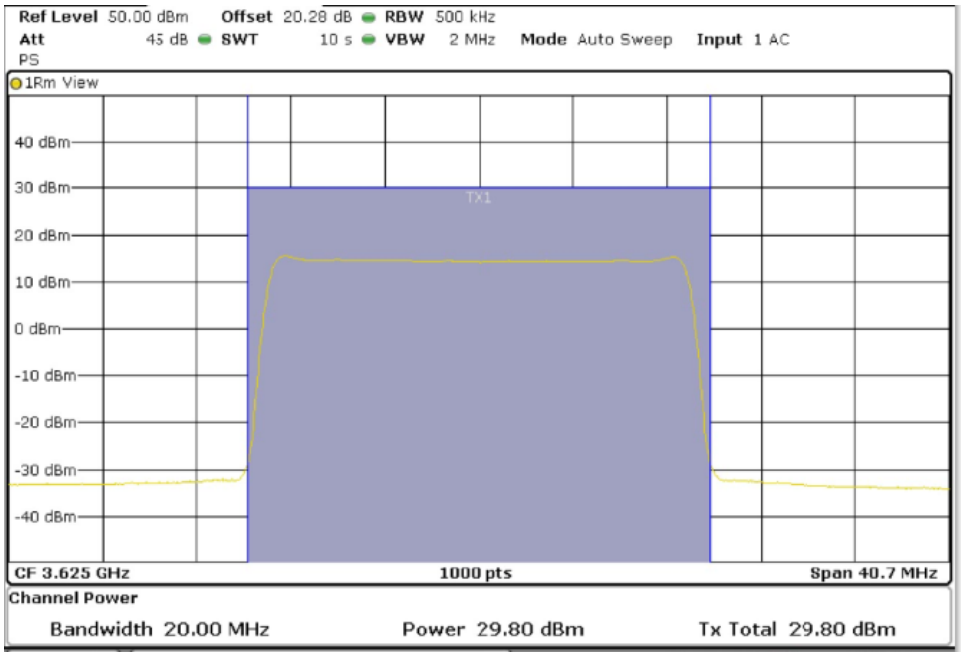
QPSK

Port 1

Lowest Channel (3560 MHz)

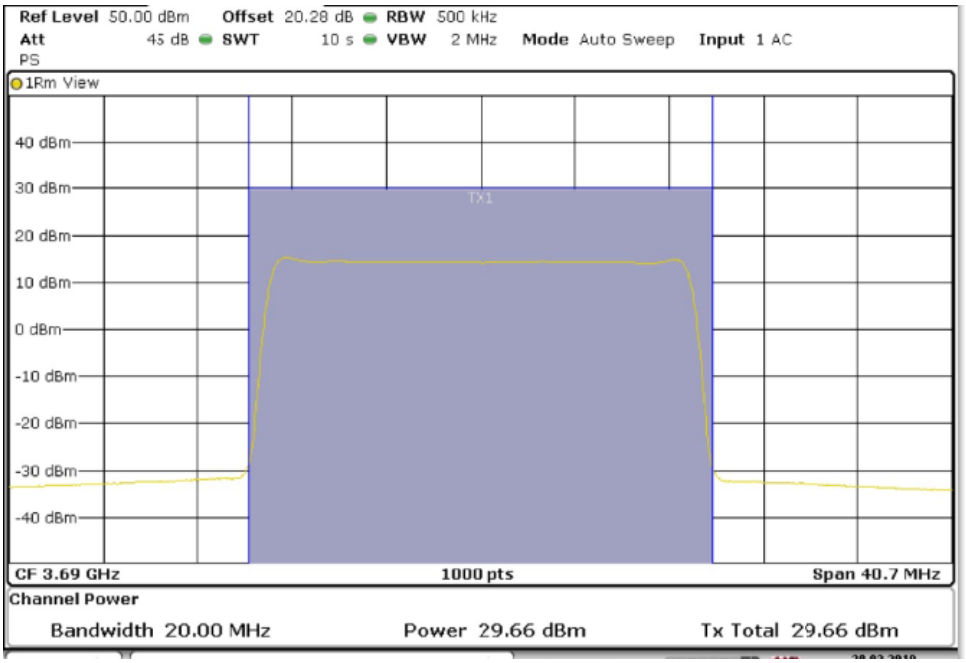


Middle Channel (3625 MHz)



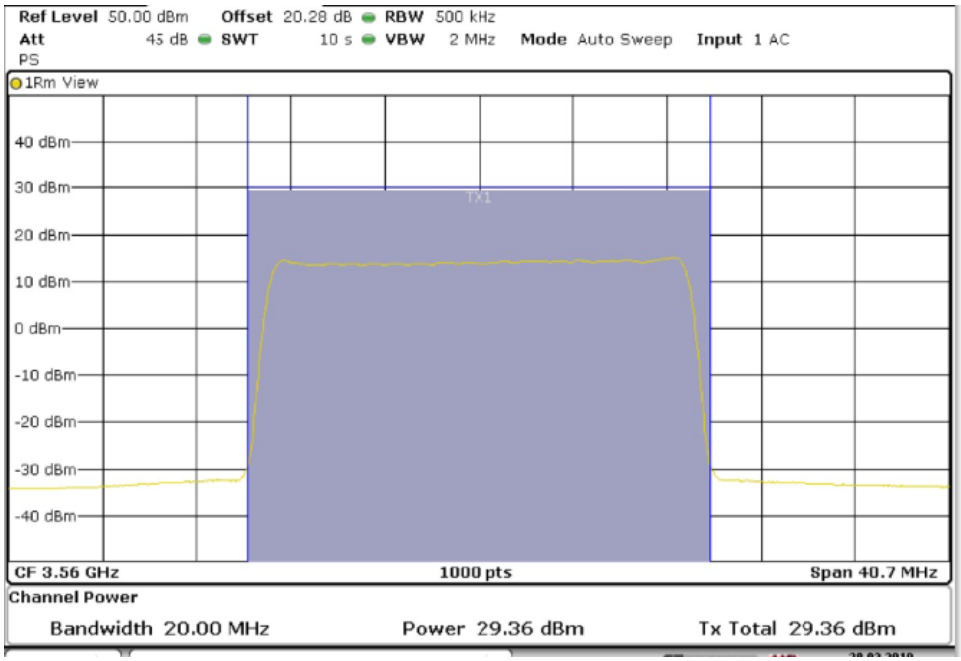
TEST RESULTS (Cont.):	

Highest Channel (3690 MHz)



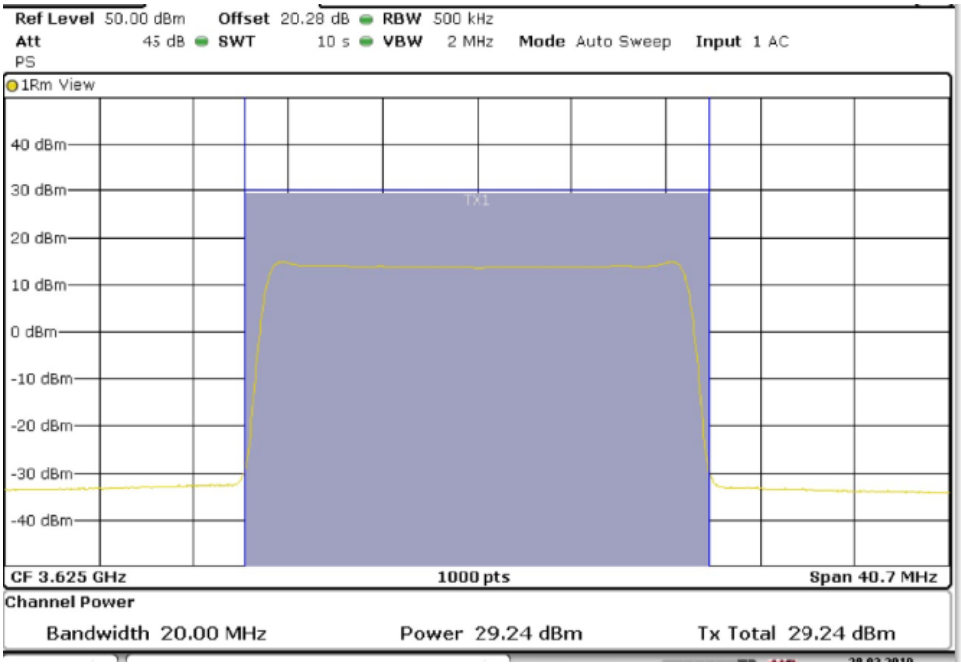
Port 2

Lowest Channel (3560 MHz)

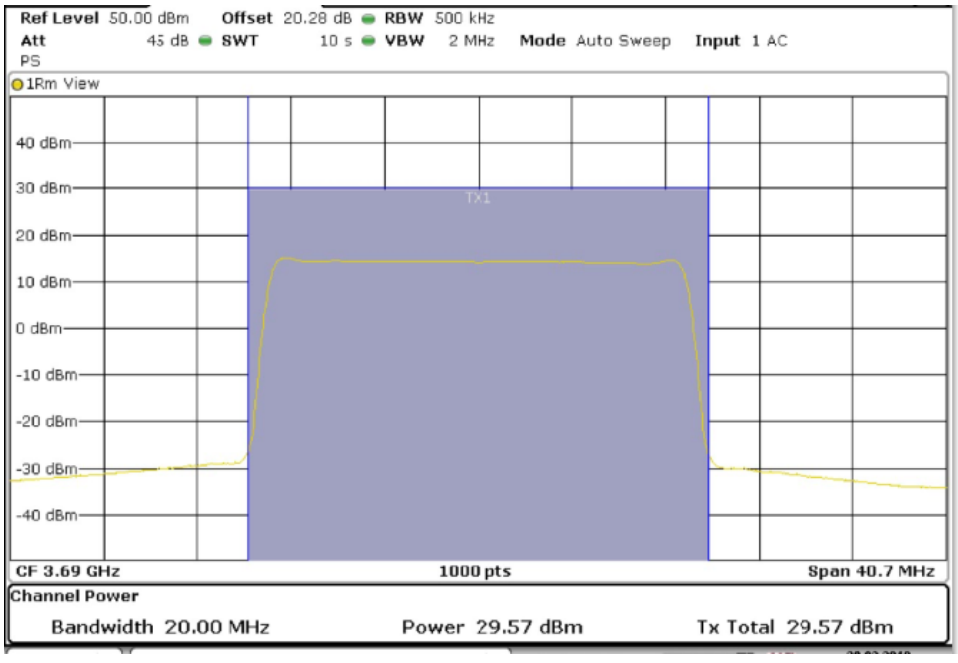


TEST RESULTS (Cont.):	

Middle Channel (3625 MHz)



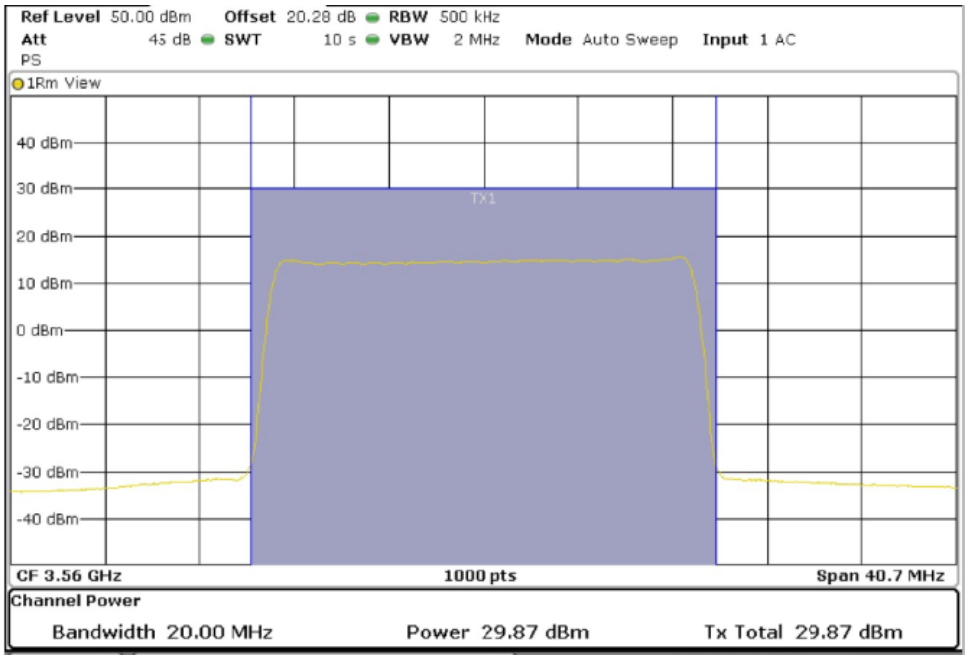
Highest Channel (3690 MHz)



TEST RESULTS (Cont.):	

Port 3

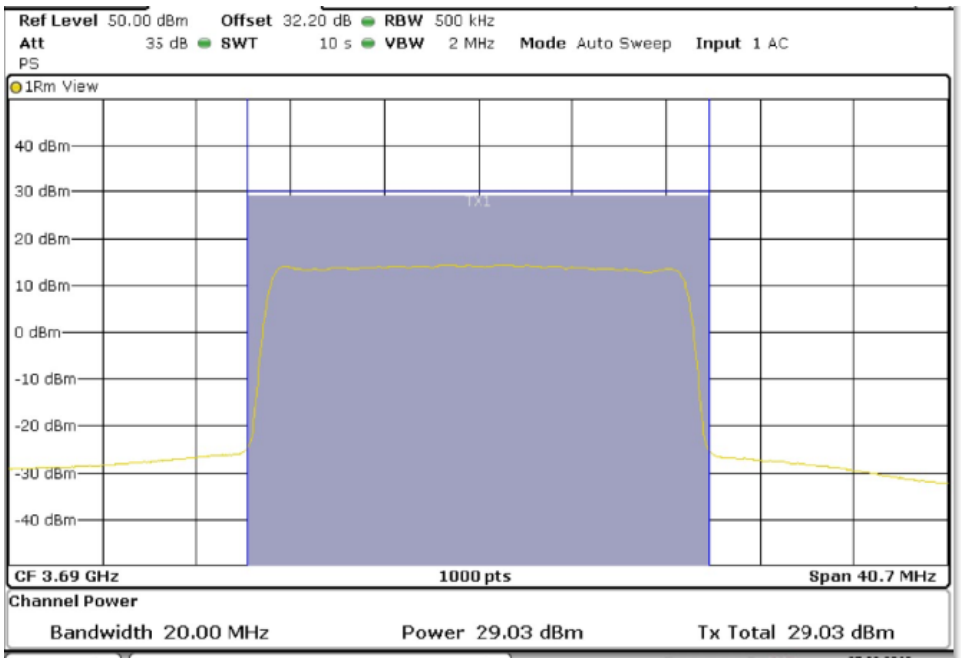
Lowest Channel (3560 MHz)



Middle Channel (3625 MHz)

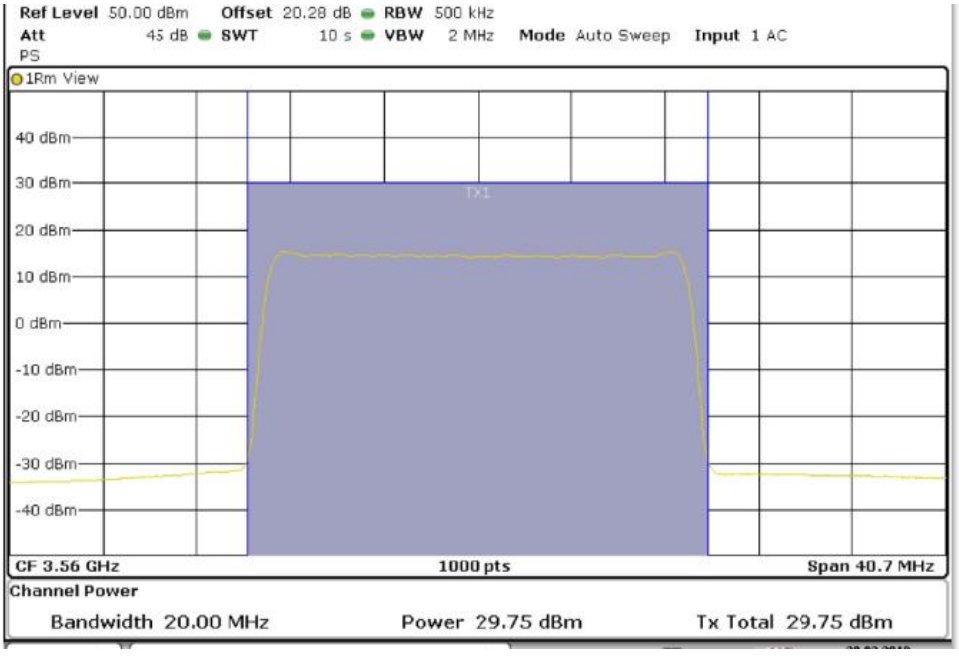
TEST RESULTS (Cont.):	

Highest Channel (3690 MHz)



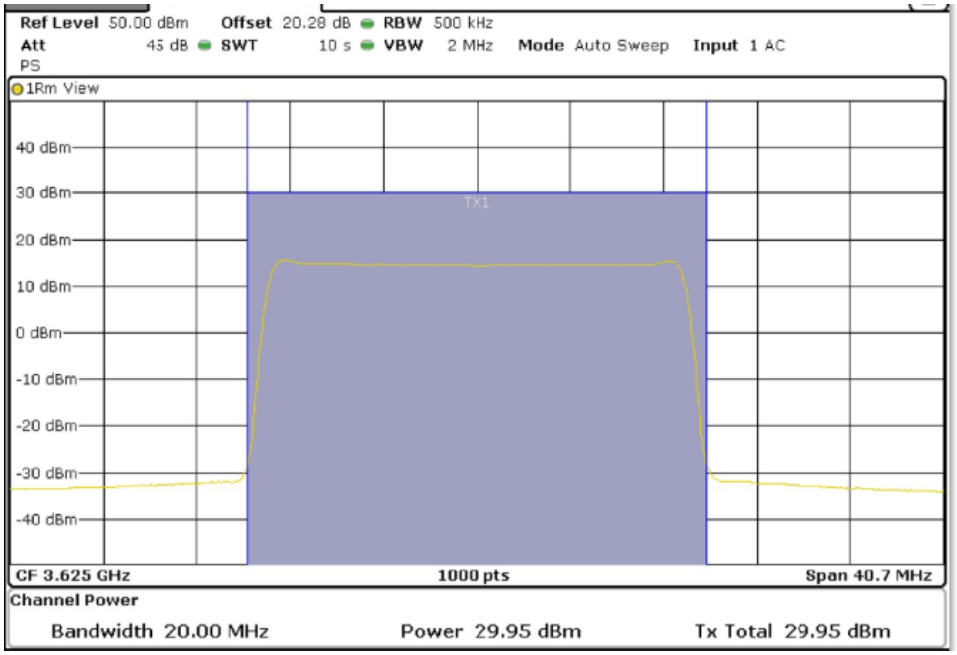
Port 4

Lowest Channel (3560 MHz)

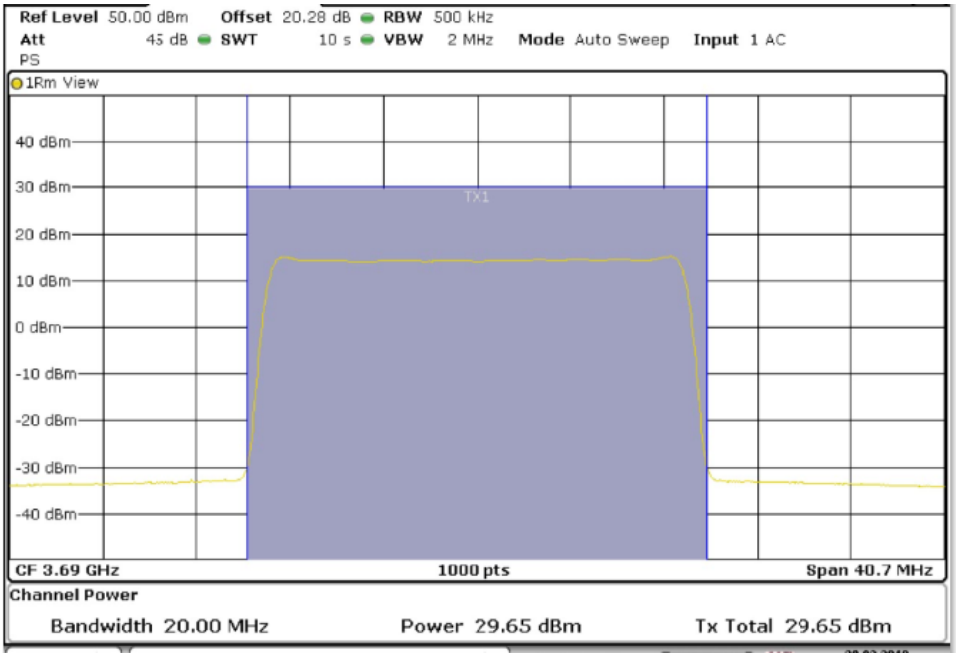


TEST RESULTS (Cont.):	

Middle Channel (3625 MHz)



Highest Channel (3690 MHz)



TEST A.3: 99% OBW AND -26 DB BANDWIDTH

LIMITS:	Product standard:	Part 2.1049
	Test standard:	ANSI C63.26-2015

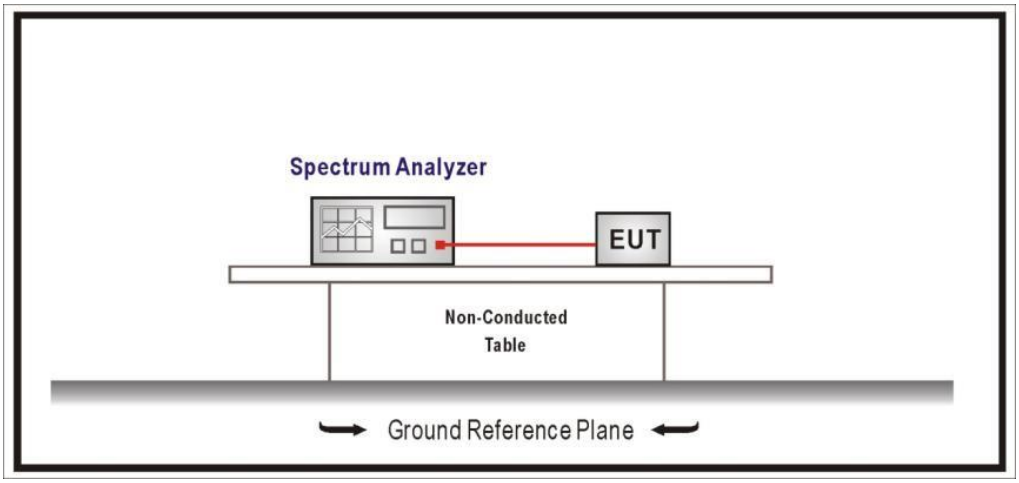
LIMITS

The 99% occupied bandwidth, that is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission shall be measured.

The -26 dB Bandwidth is the bandwidth of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB from the peak of the carrier.

TEST SETUP:	

The 99% occupied bandwidth and the -26dB bandwidth were measured directly using the built-in bandwidth measuring option of signal analyzer with following the procedure stated in the section 5.4.3 and 5.4.4 of ANSI C63.26-2015 and the section 4.2 and 4.3 of FCC KDB 971168 D01 v03 r01.



TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#01 (Band 48)
TEST RESULTS:	PASS

10 MHz BW

Port 1

QPSK

	Lowest frequency 3555 MHz	Middle frequency 3625 MHz	Highest frequency 3695 MHz
99% OBW (MHz)	9.02	9.02	9.00
-26 dB Bandwidth (MHz)	9.93	9.90	9.87
Measurement uncertainty (kHz)	<± 8.33		

64QAM

	Lowest frequency 3555 MHz	Middle frequency 3625 MHz	Highest frequency 3695 MHz
99% OBW (MHz)	8.90	8.90	8.92
-26 dB Bandwidth (MHz)	9.73	9.67	9.73
Measurement uncertainty (kHz)	<± 8.33		

Port 2

QPSK

	Lowest frequency 3555 MHz	Middle frequency 3625 MHz	Highest frequency 3695 MHz
99% OBW (MHz)	9.02	9.02	9.02
-26 dB Bandwidth (MHz)	9.93	9.90	9.90
Measurement uncertainty (kHz)	<± 8.33		

64QAM

	Lowest frequency 3555 MHz	Middle frequency 3625 MHz	Highest frequency 3695 MHz
99% OBW (MHz)	8.92	8.92	8.94
-26 dB Bandwidth (MHz)	9.67	9.70	9.70
Measurement uncertainty (kHz)	<± 8.33		

TEST RESULTS (Cont.):	

Port 3

QPSK

	Lowest frequency 3555 MHz	Middle frequency 3625 MHz	Highest frequency 3695 MHz
99% OBW (MHz)	9.04	9.04	9.02
-26 dB Bandwidth (MHz)	9.96	9.90	9.90
Measurement uncertainty (kHz)	<± 8.33		

64QAM

	Lowest frequency 3555 MHz	Middle frequency 3625 MHz	Highest frequency 3695 MHz
99% OBW (MHz)	8.92	8.92	8.90
-26 dB Bandwidth (MHz)	9.67	9.73	9.70
Measurement uncertainty (kHz)	<± 8.33		

Port 4

QPSK

	Lowest frequency 3555 MHz	Middle frequency 3625 MHz	Highest frequency 3695 MHz
99% OBW (MHz)	9.04	9.04	9.02
-26 dB Bandwidth (MHz)	9.87	9.90	9.90
Measurement uncertainty (kHz)	<± 8.33		

64QAM

	Lowest frequency 3555 MHz	Middle frequency 3625 MHz	Highest frequency 3695 MHz
99% OBW (MHz)	8.92	8.92	8.92
-26 dB Bandwidth (MHz)	9.70	9.70	9.64
Measurement uncertainty (kHz)	<± 8.33		

TEST RESULTS (Cont.):	

20MHz BW

Port 1

QPSK

	Lowest frequency 3560 MHz	Middle frequency 3625 MHz	Highest frequency 3690 MHz
99% OBW (MHz)	17.84	17.84	17.84
-26 dB Bandwidth (MHz)	19.00	18.96	18.96
Measurement uncertainty (kHz)	<± 8.33		

64QAM

	Lowest frequency 3560 MHz	Middle frequency 3625 MHz	Highest frequency 3690 MHz
99% OBW (MHz)	17.96	18.00	18.00
-26 dB Bandwidth (MHz)	18.72	18.84	18.84
Measurement uncertainty (kHz)	<± 8.33		

Port 2

QPSK

	Lowest frequency 3560 MHz	Middle frequency 3625 MHz	Highest frequency 3690 MHz
99% OBW (MHz)	17.84	17.84	17.84
-26 dB Bandwidth (MHz)	18.96	19.00	18.96
Measurement uncertainty (kHz)	<± 8.33		

64QAM

	Lowest frequency 3560 MHz	Middle frequency 3625 MHz	Highest frequency 3690 MHz
99% OBW (MHz)	17.92	18.00	17.96
-26 dB Bandwidth (MHz)	18.64	18.84	18.80
Measurement uncertainty (kHz)	<± 8.33		

TEST RESULTS (Cont.):	

Port 3

QPSK

	Lowest frequency 3560 MHz	Middle frequency 3625 MHz	Highest frequency 3690 MHz
99% OBW (MHz)	17.80	17.84	17.80
-26 dB Bandwidth (MHz)	18.92	18.96	19.00
Measurement uncertainty (kHz)	<± 8.33		

64QAM

	Lowest frequency 3560 MHz	Middle frequency 3625 MHz	Highest frequency 3690 MHz
99% OBW (MHz)	17.96	18.00	18.00
-26 dB Bandwidth (MHz)	18.84	18.84	18.84
Measurement uncertainty (kHz)	<± 8.33		

Port 4

QPSK

	Lowest frequency 3560 MHz	Middle frequency 3625 MHz	Highest frequency 3690 MHz
99% OBW (MHz)	17.84	17.84	17.84
-26 dB Bandwidth (MHz)	18.96	18.96	18.96
Measurement uncertainty (kHz)	<± 8.33		

64QAM

	Lowest frequency 3560 MHz	Middle frequency 3625 MHz	Highest frequency 3690 MHz
99% OBW (MHz)	18.00	17.96	18.04
-26 dB Bandwidth (MHz)	18.72	18.84	18.84
Measurement uncertainty (kHz)	<± 8.33		

(See next plots)

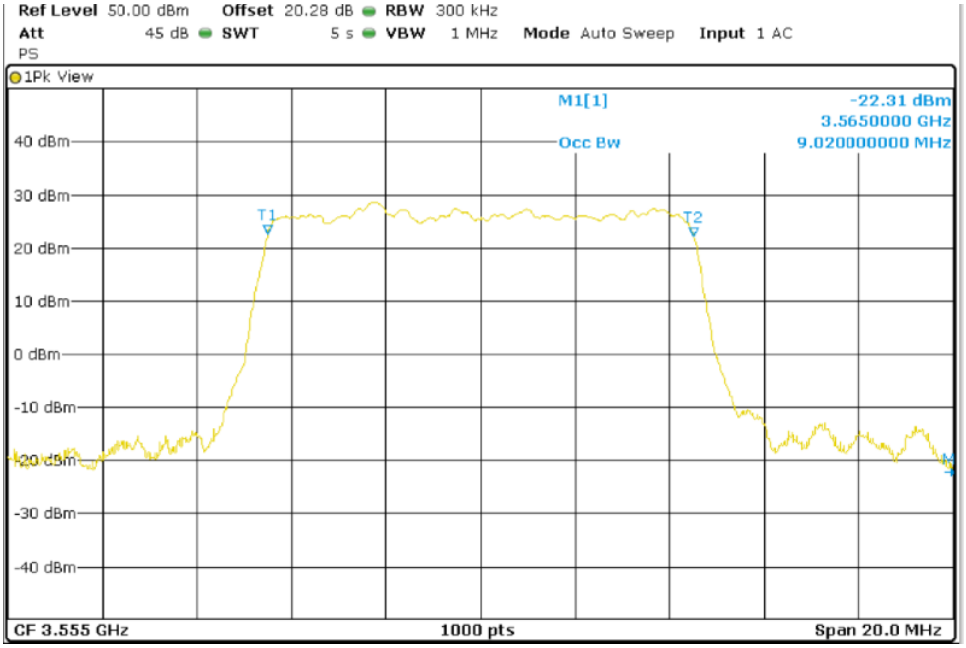
TEST RESULTS (Cont.):	

Port 1

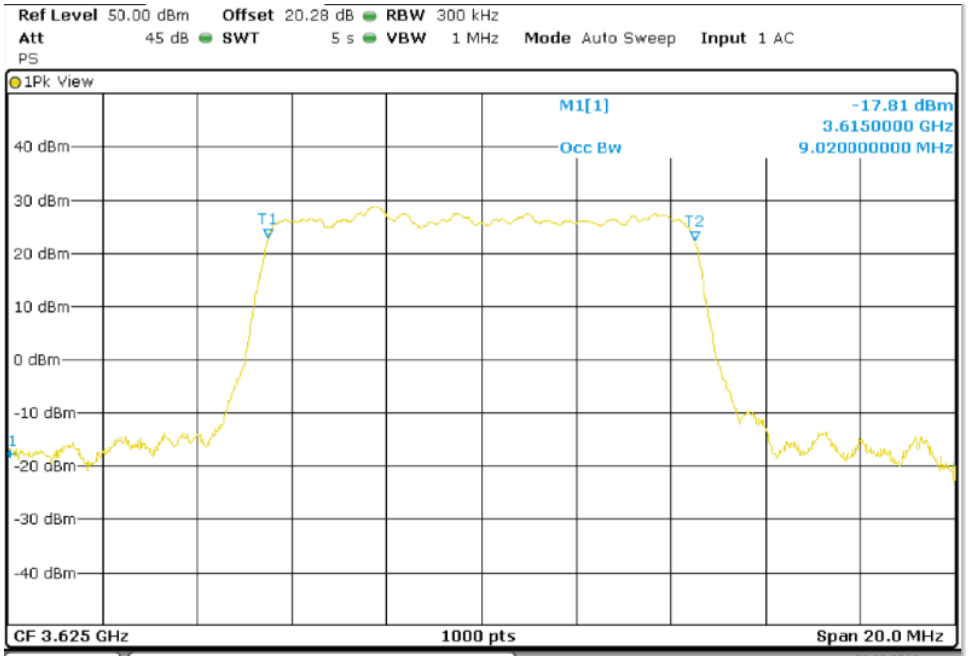
10 MHz BW

QPSK

Lowest Channel (3555 MHz)

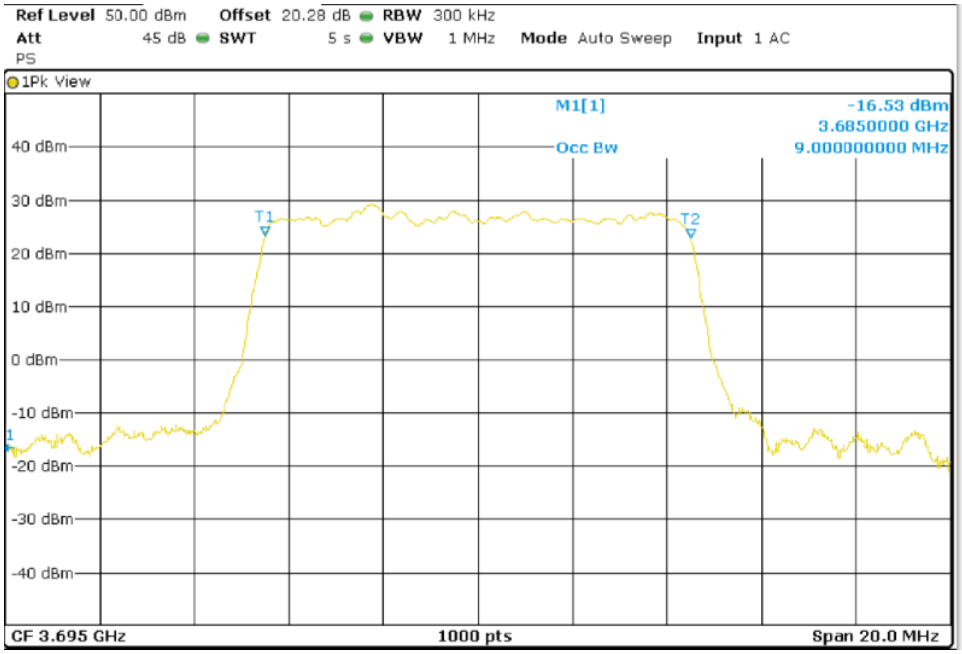


Middle Channel (3625 MHz)



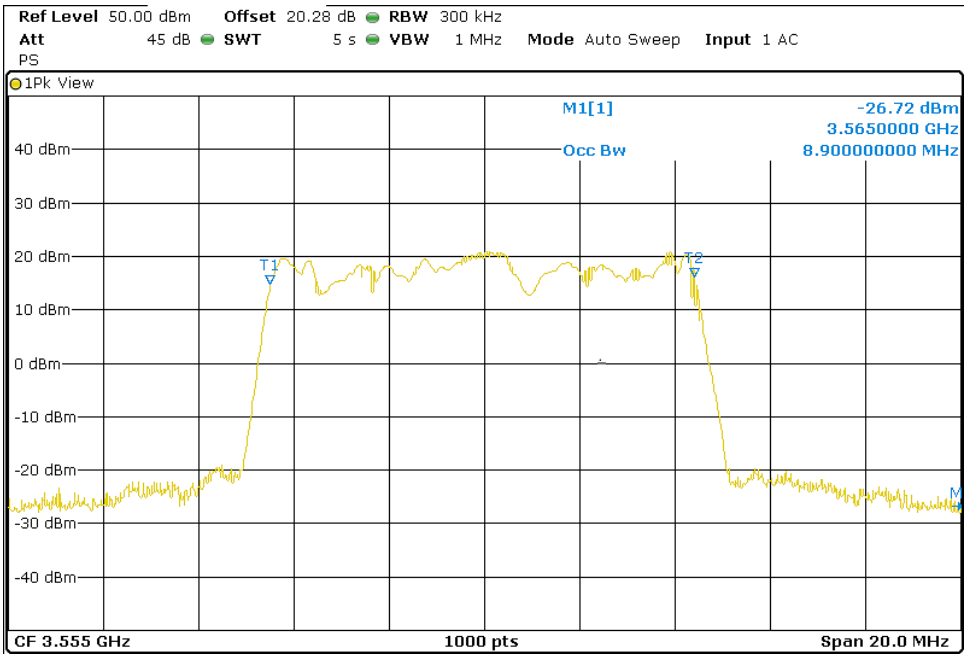
TEST RESULTS (Cont.):	

High Channel (3695 MHz)



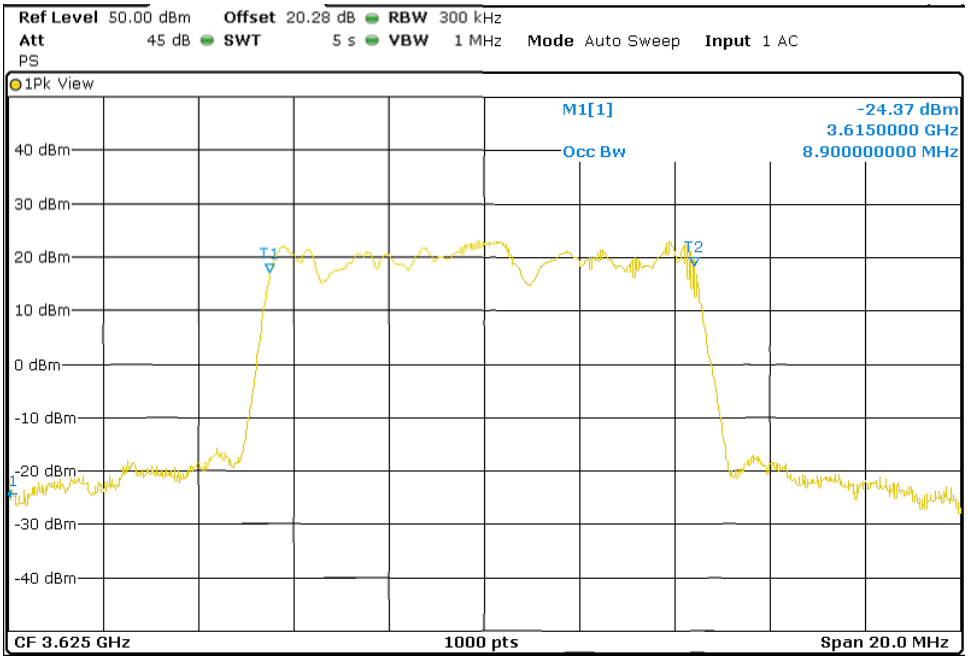
64QAM

Lowest Channel (3555 MHz)

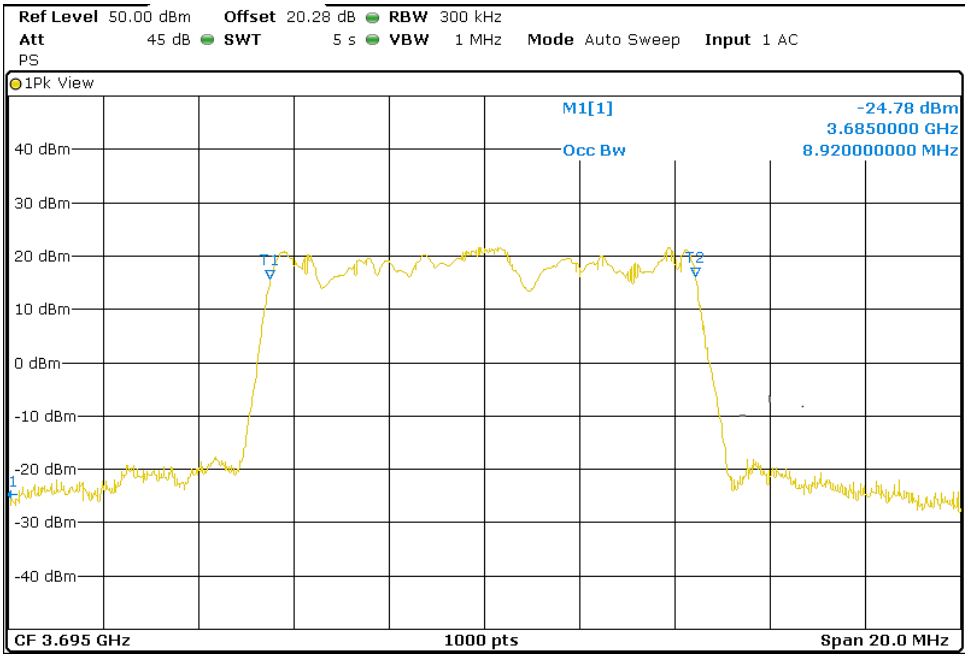


TEST RESULTS (Cont.):	

Middle Channel (3625 MHz)



High Channel (3695 MHz)

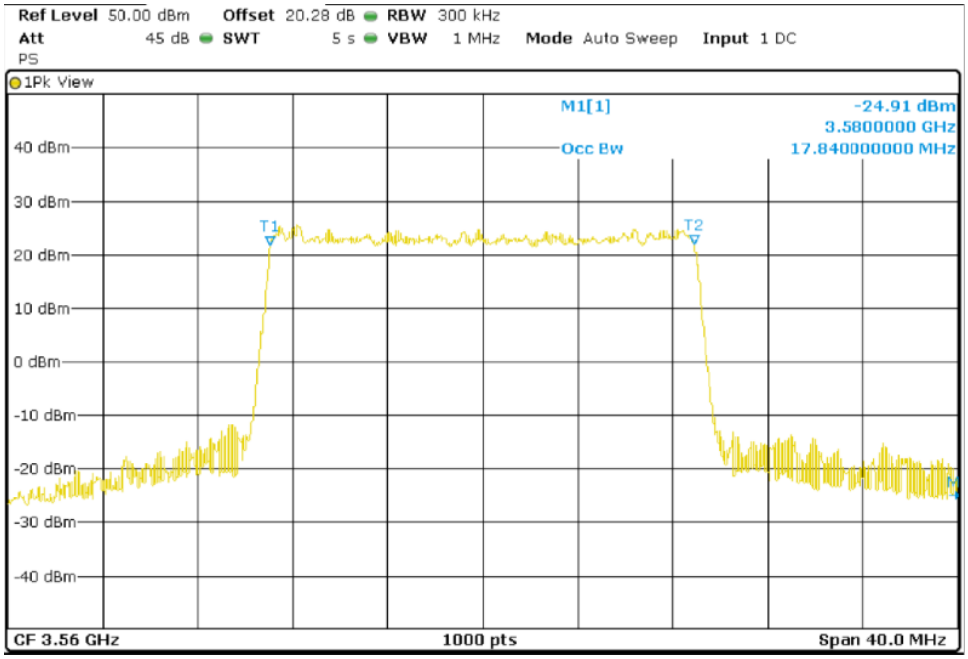


TEST RESULTS (Cont.):	

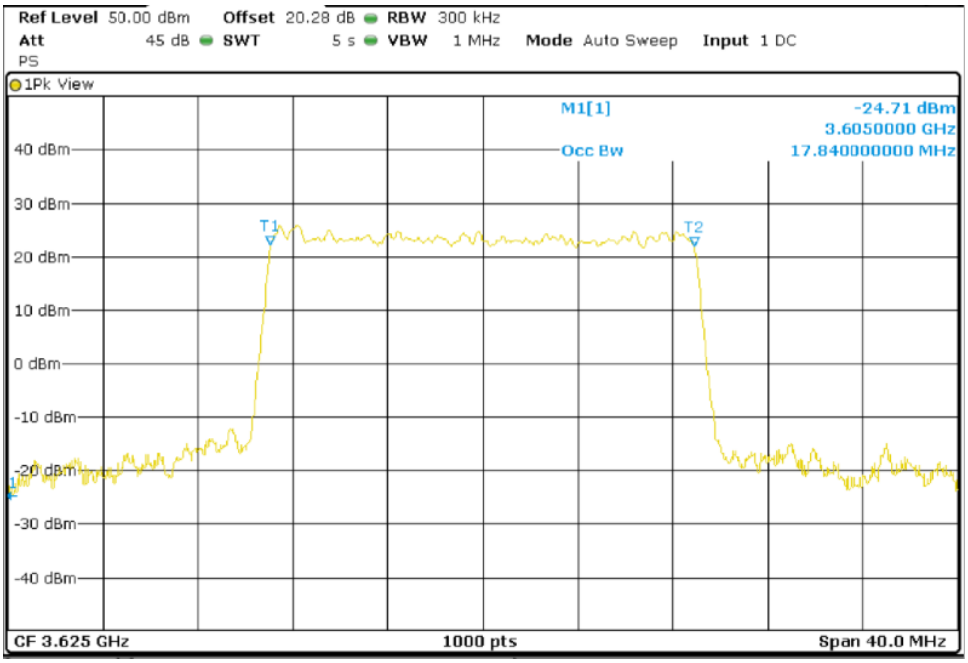
20 MHz BW

QPSK

Lowest Channel (3560 MHz)

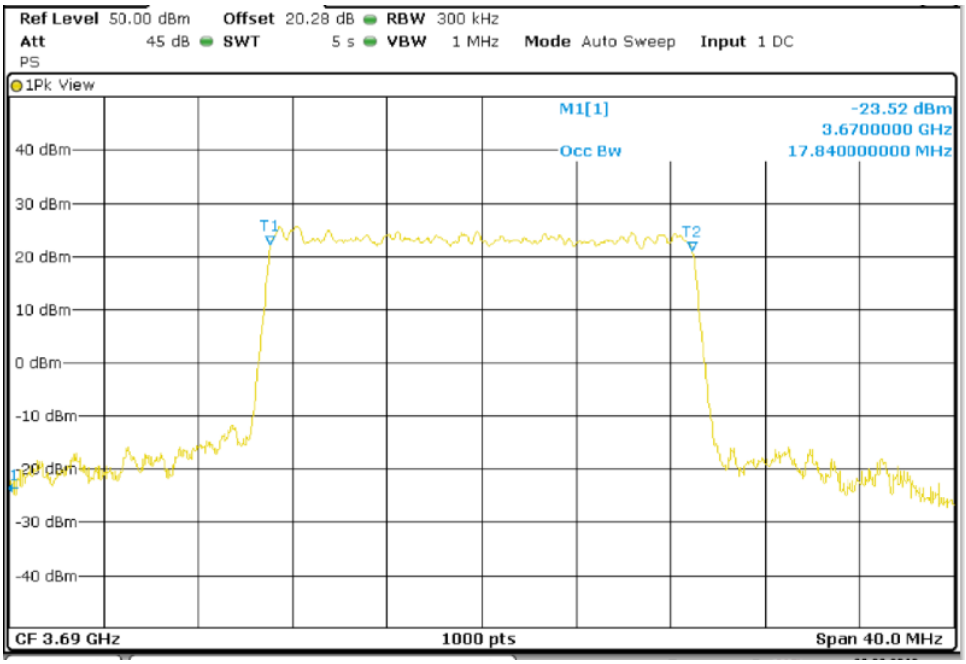


Middle Channel (3625 MHz)



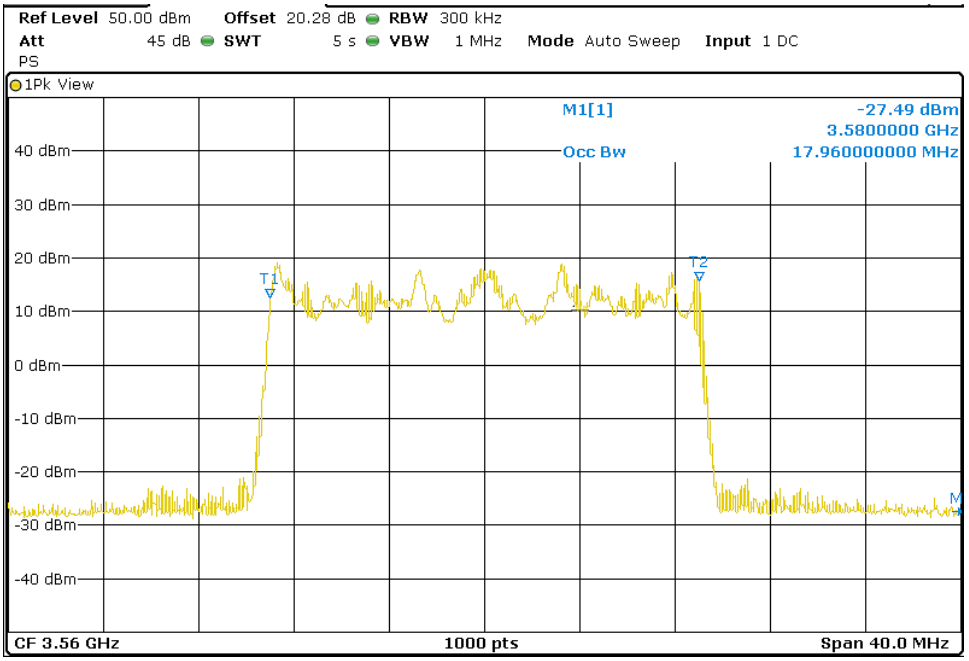
TEST RESULTS (Cont.):	

High Channel (3690 MHz)



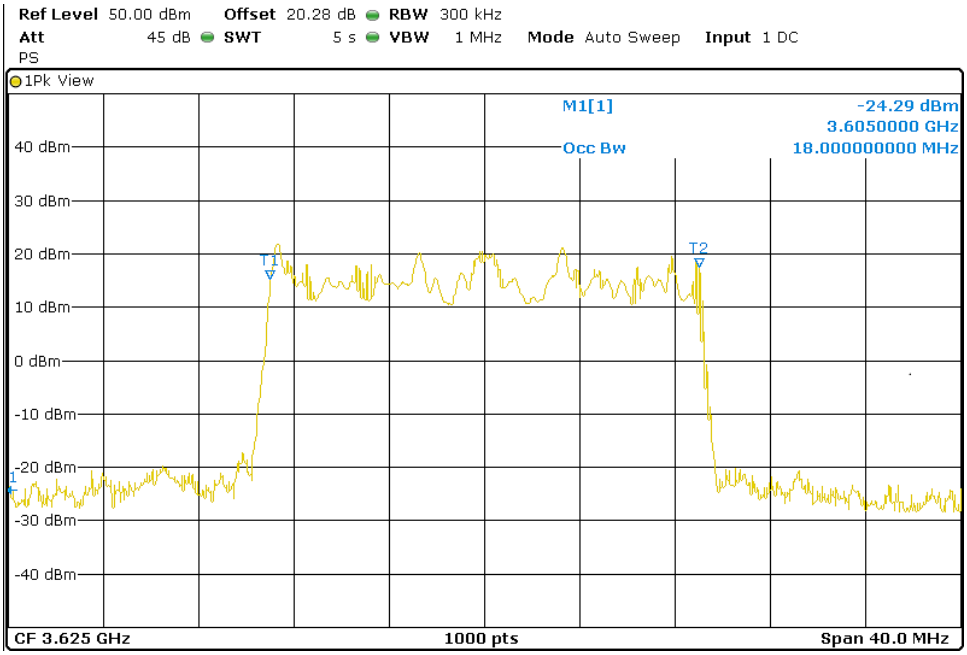
64QAM

Lowest Channel (3560 MHz)

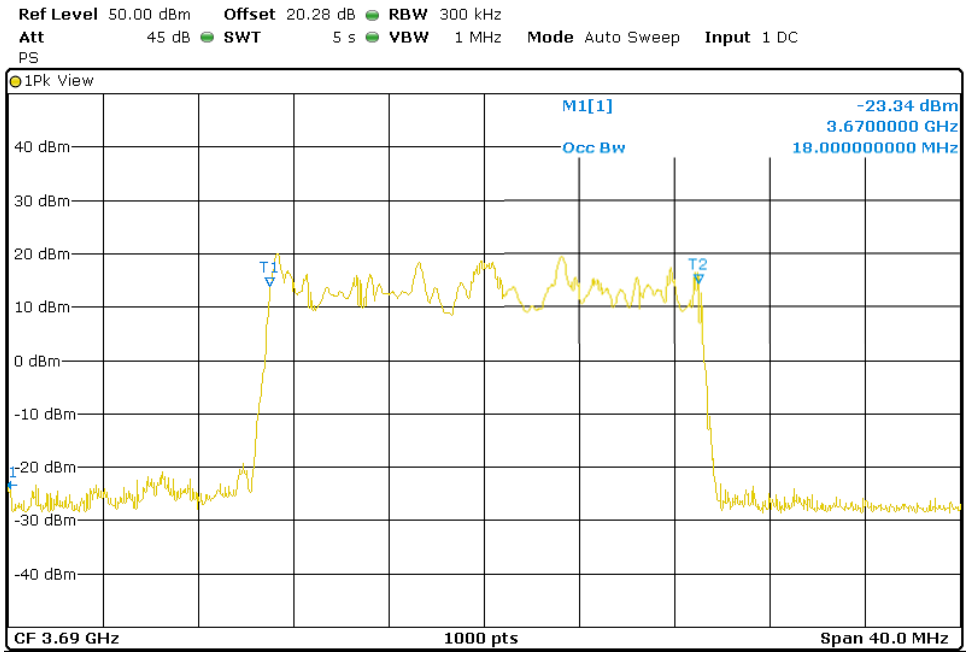


TEST RESULTS (Cont.):	

Middle Channel (3625 MHz)



High Channel (3690 MHz)

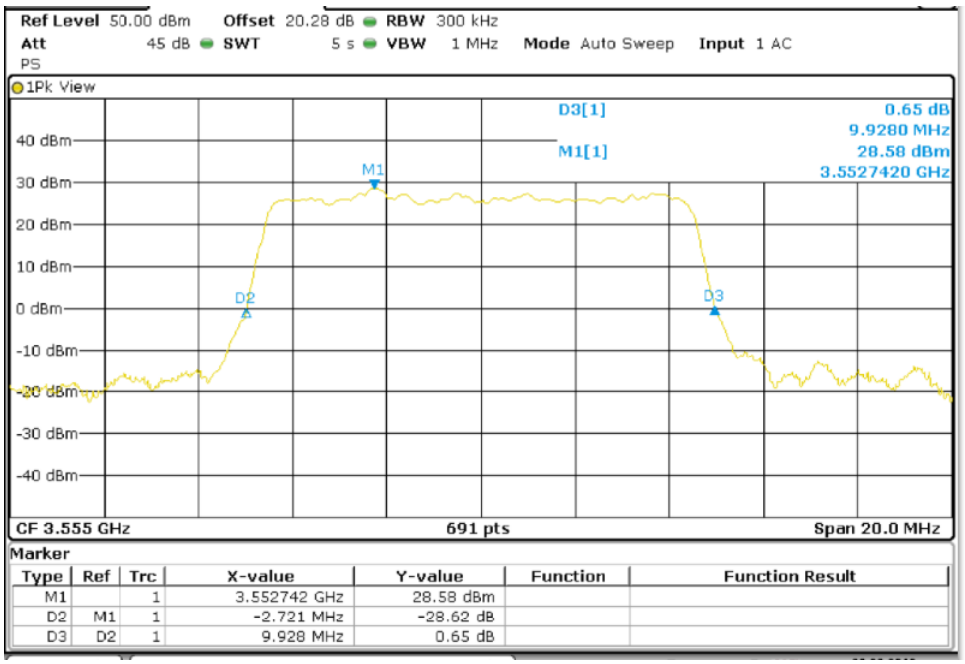


TEST RESULTS (Cont.):	-26dB Bandwidth

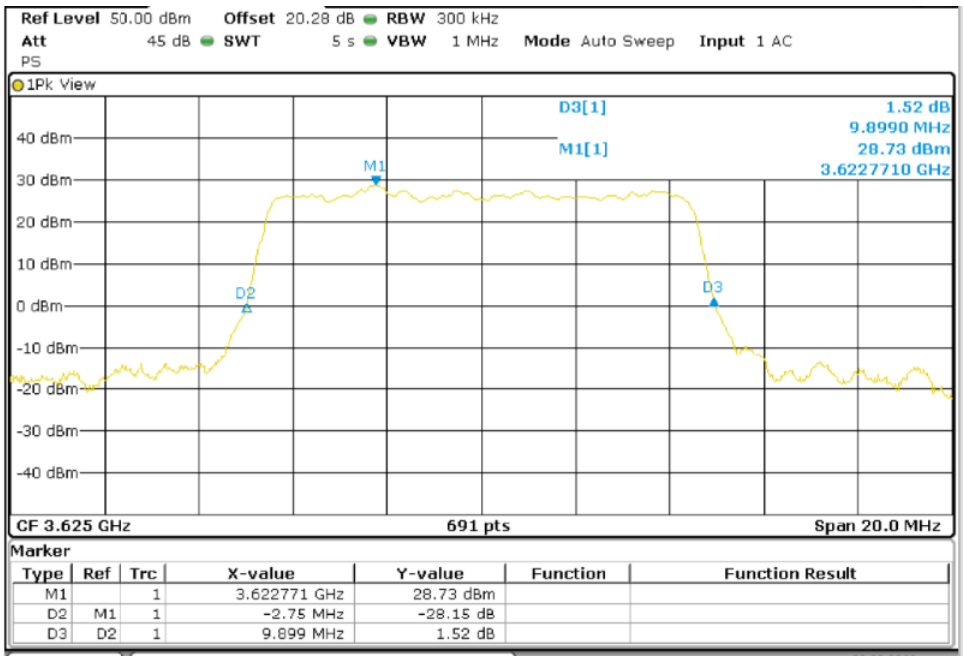
10 MHz BW

QPSK

Lowest Channel (3555 MHz)

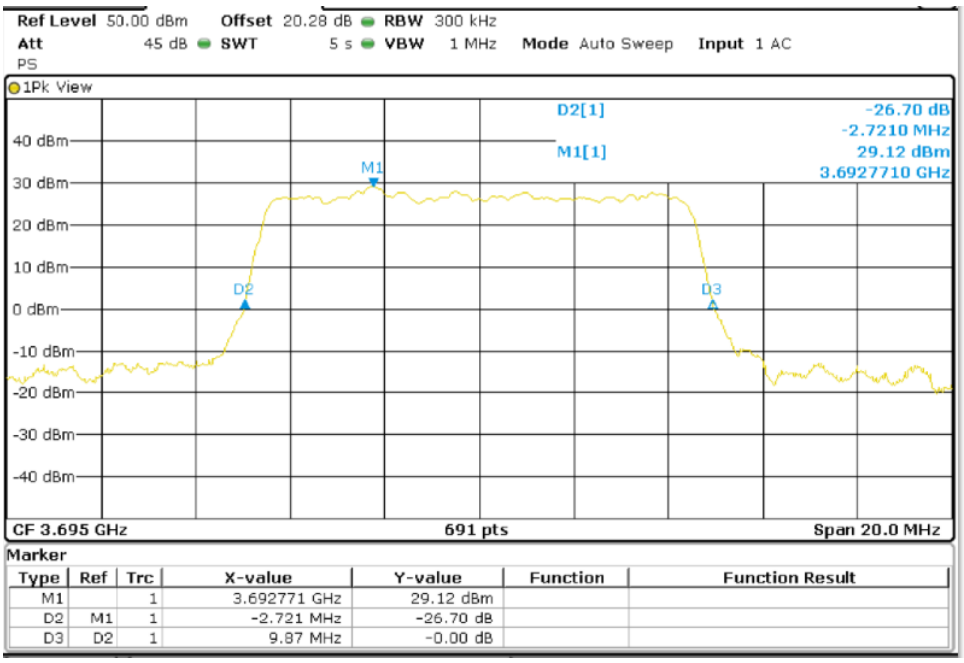


Middle Channel (3625 MHz)



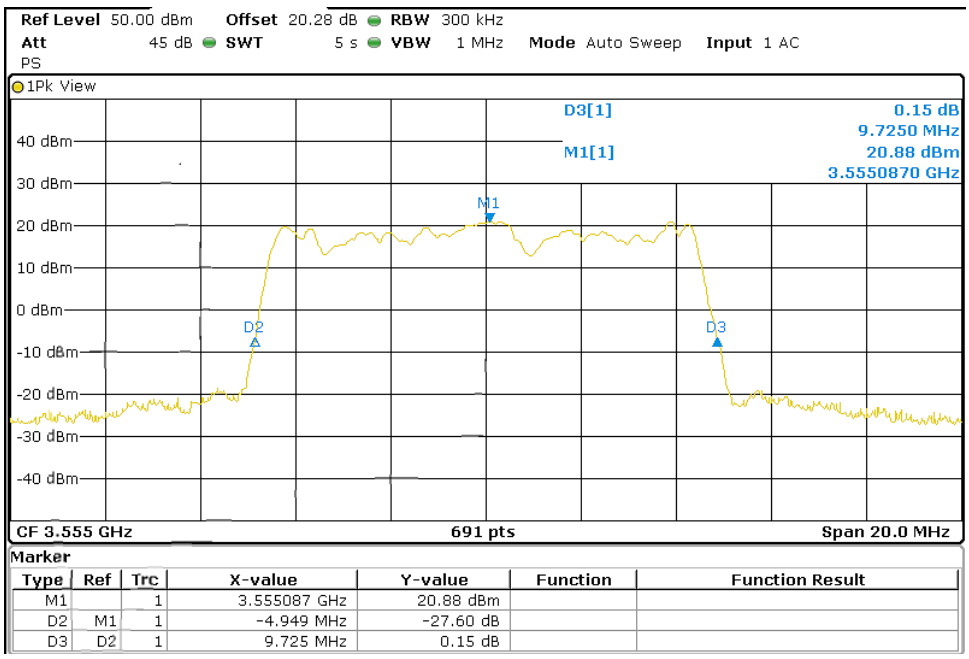
TEST RESULTS (Cont.):	

High Channel (3695 MHz)



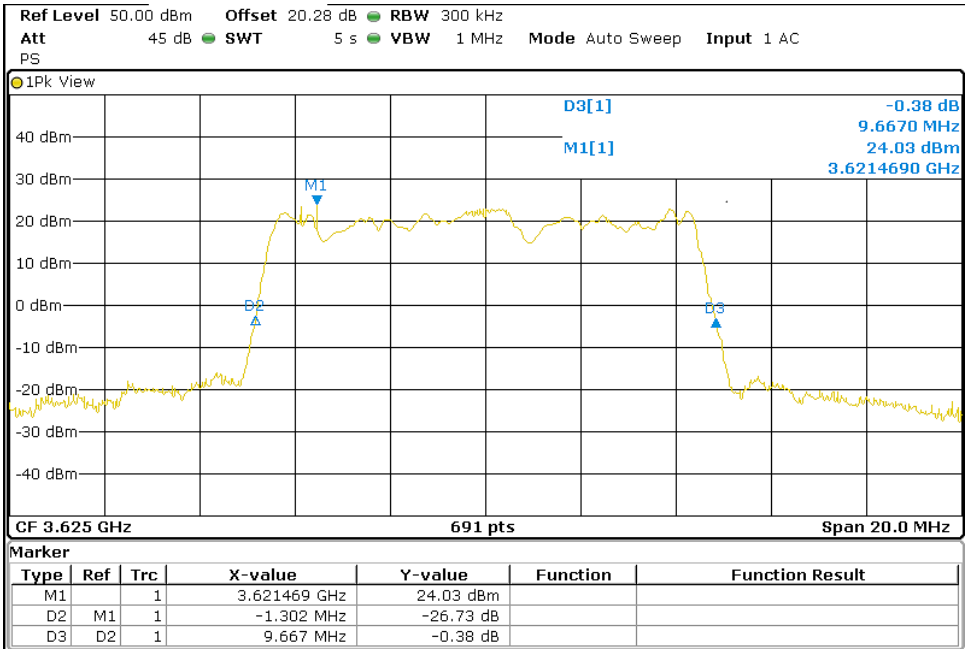
64QAM

Lowest Channel (3555 MHz)



TEST RESULTS (Cont.):	

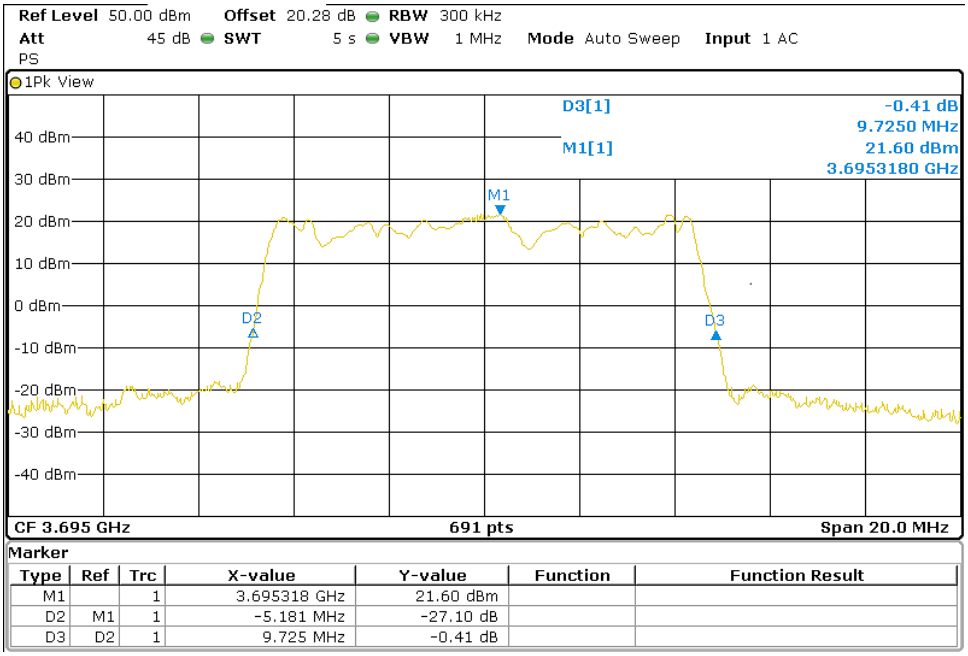
Middle Channel (3625 MHz)



Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	3.621469 GHz	24.03 dBm		
D2	M1	1	-1.302 MHz	-26.73 dB		
D3	D2	1	9.667 MHz	-0.38 dB		

High Channel (3695 MHz)



Marker

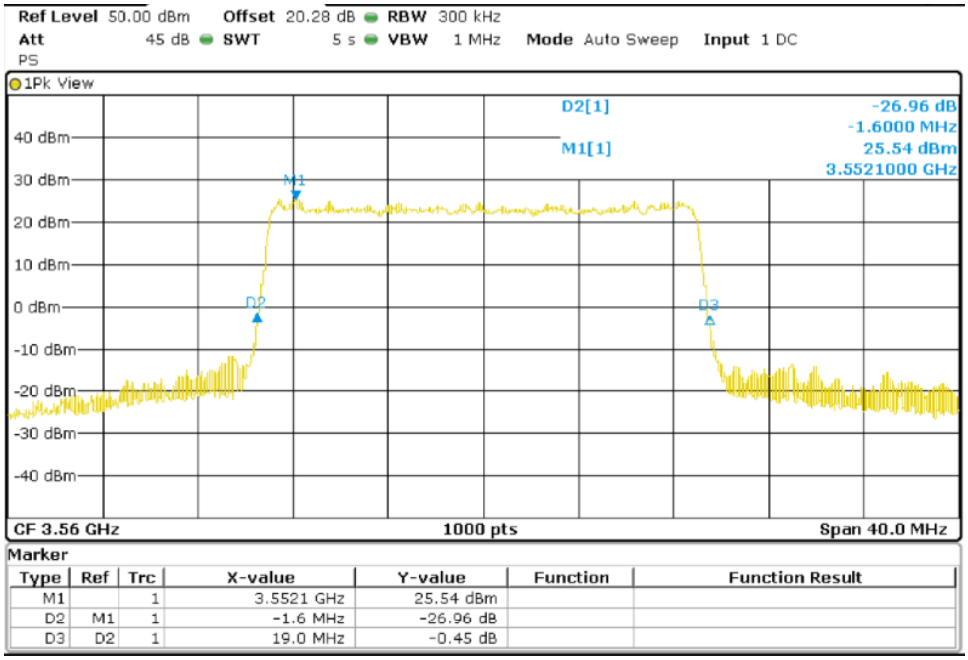
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	3.695318 GHz	21.60 dBm		
D2	M1	1	-5.181 MHz	-27.10 dB		
D3	D2	1	9.725 MHz	-0.41 dB		

TEST RESULTS (Cont.):	

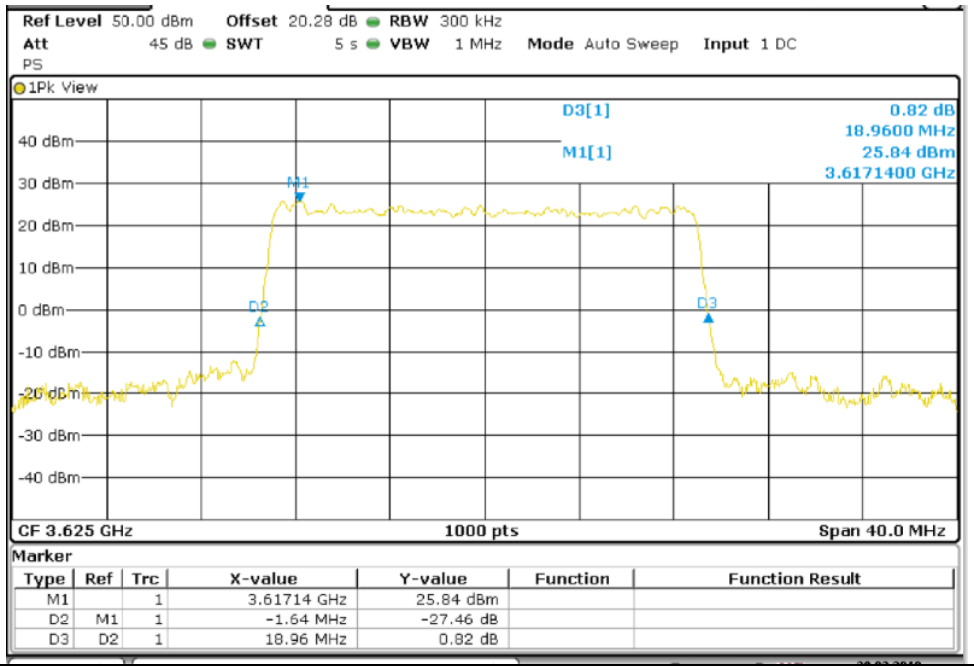
20 MHz BW

QPSK

Lowest Channel (3560 MHz)

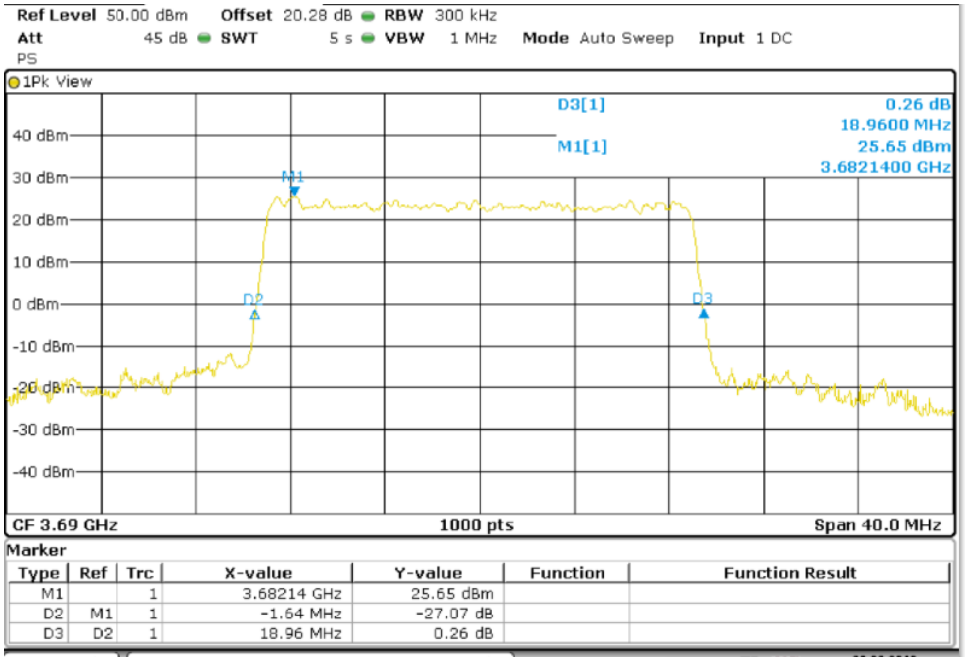


Middle Channel (3625 MHz)



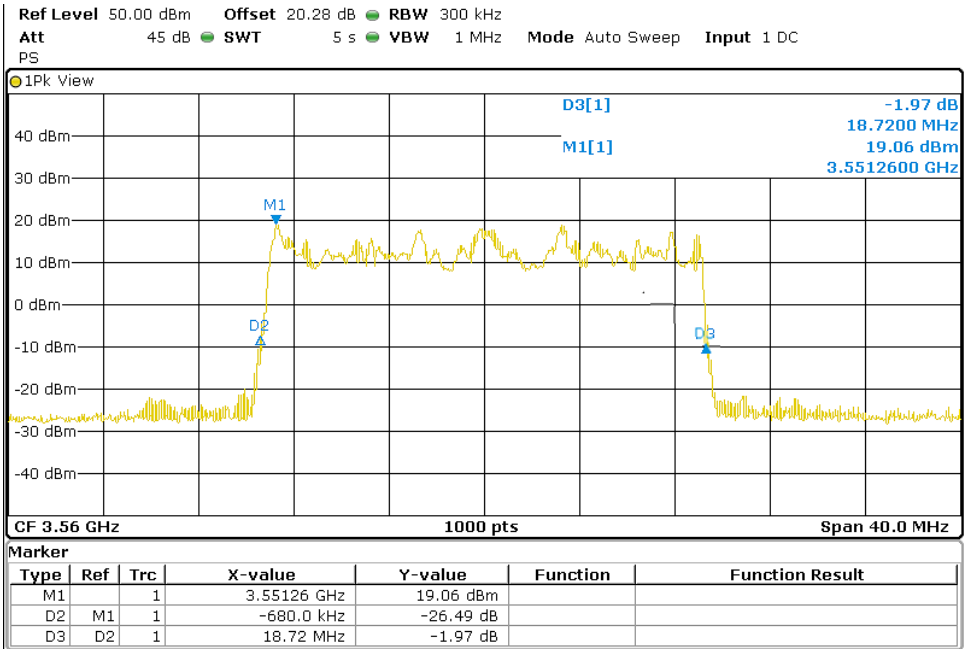
TEST RESULTS (Cont.):	

High Channel (3690 MHz)



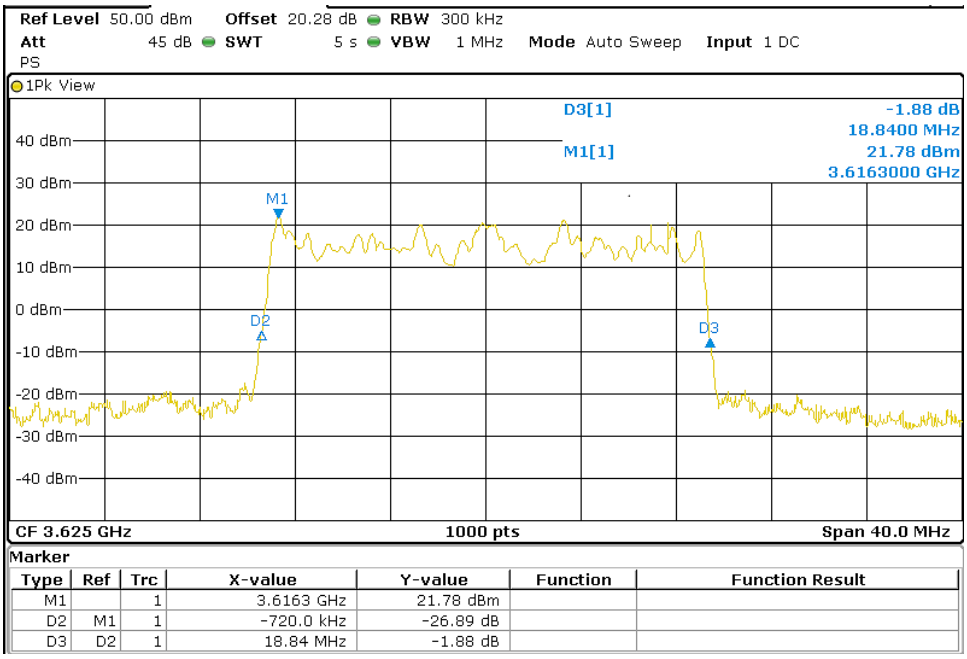
64QAM

Lowest Channel (3560 MHz)



TEST RESULTS (Cont.):	

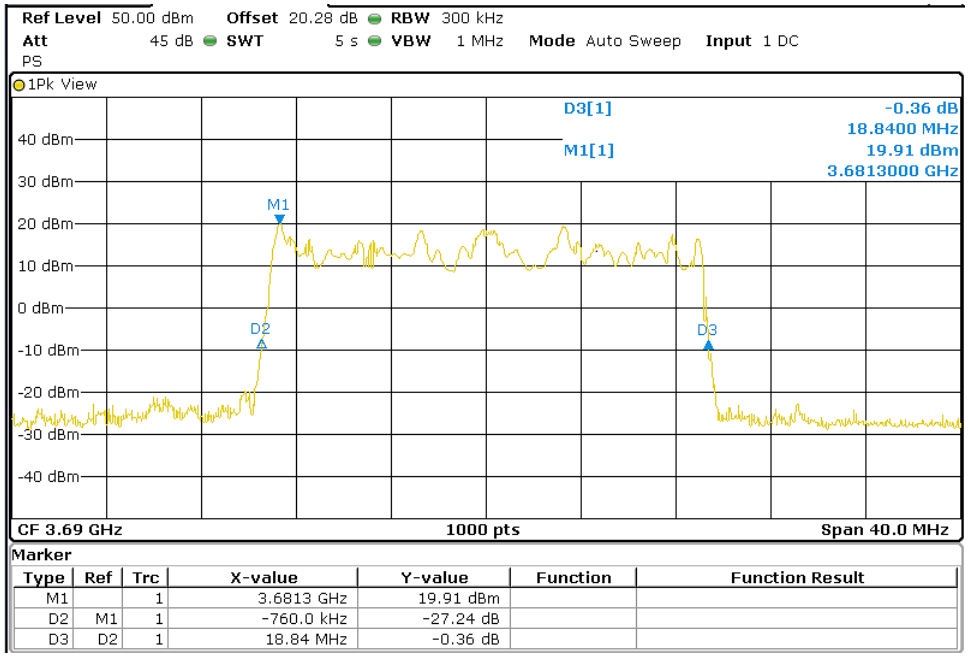
Middle Channel (3625 MHz)



Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	3.6163 GHz	21.78 dBm		
D2	M1	1	-720.0 kHz	-26.89 dB		
D3	D2	1	18.84 MHz	-1.88 dB		

High Channel (3690 MHz)



Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	3.6813 GHz	19.91 dBm		
D2	M1	1	-760.0 kHz	-27.24 dB		
D3	D2	1	18.84 MHz	-0.36 dB		

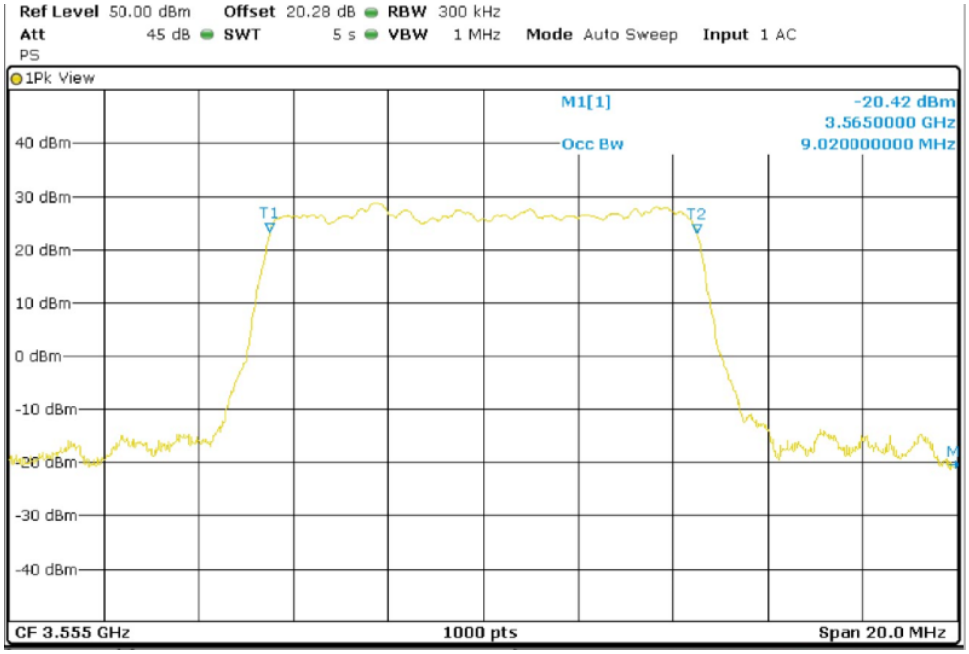
TEST RESULTS (Cont.):	

Port 2

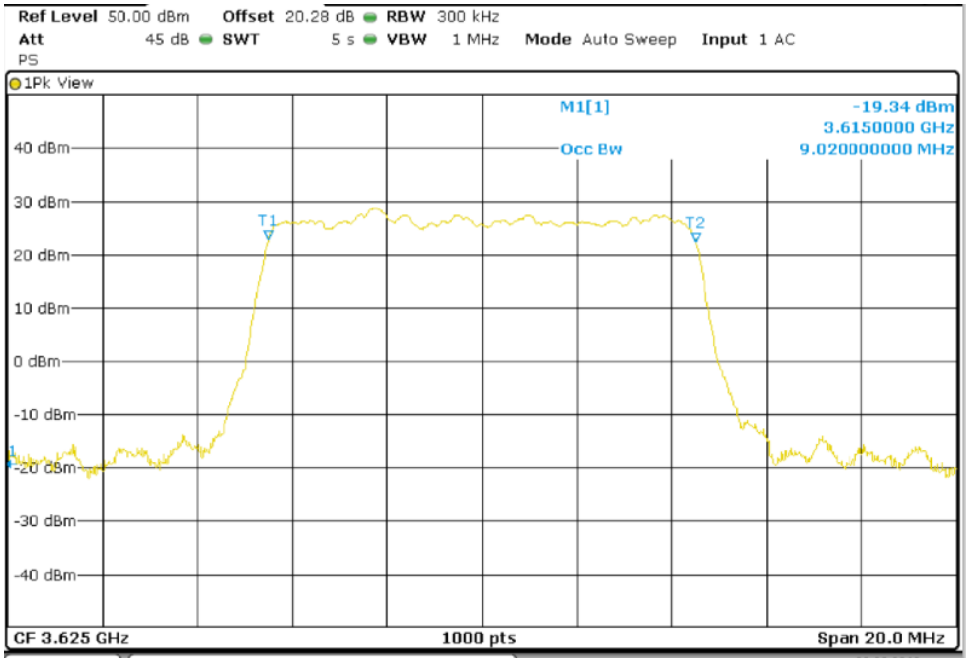
10 MHz BW

QPSK

Lowest Channel (3555 MHz)

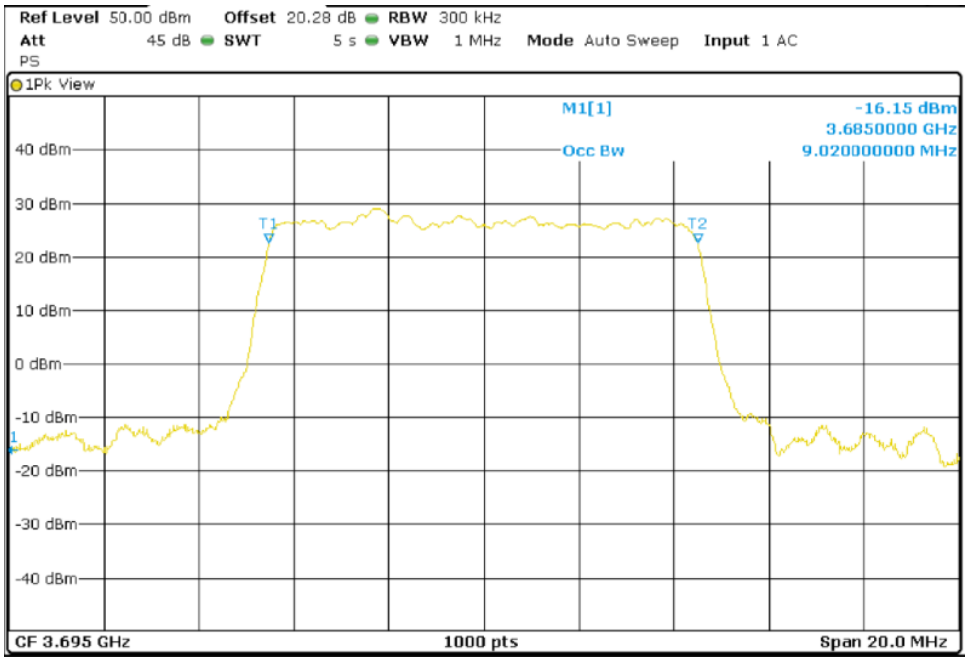


Middle Channel (3625 MHz)



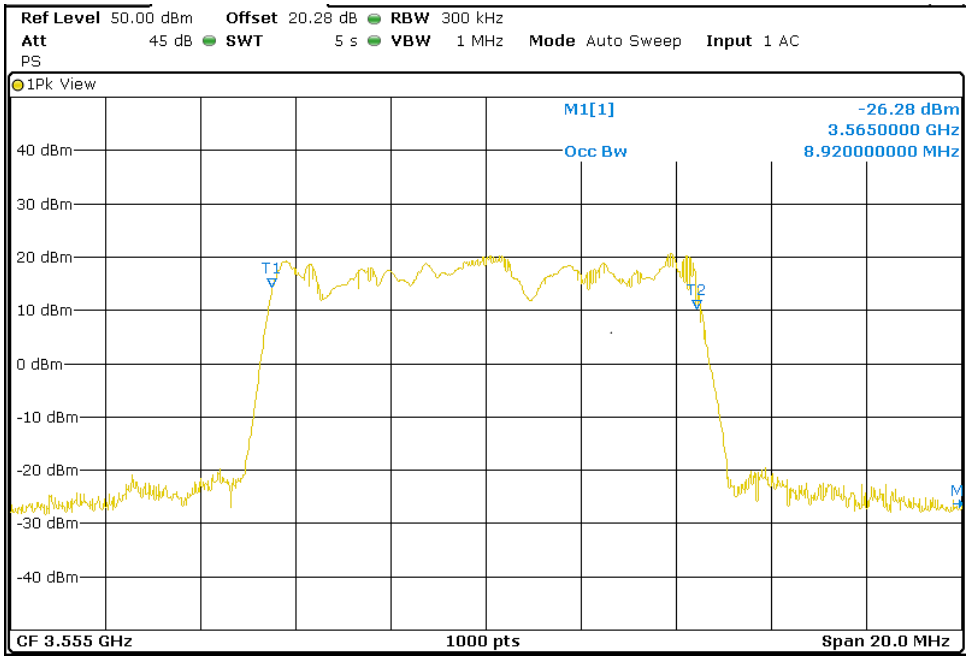
TEST RESULTS (Cont.):	

High Channel (3695 MHz)



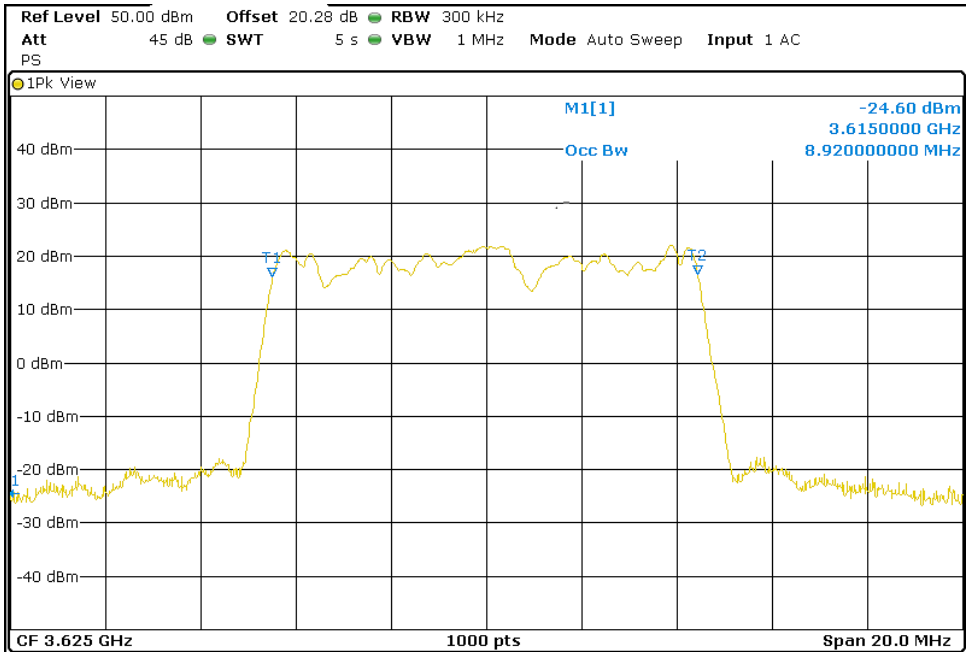
64QAM

Lowest Channel (3555 MHz)

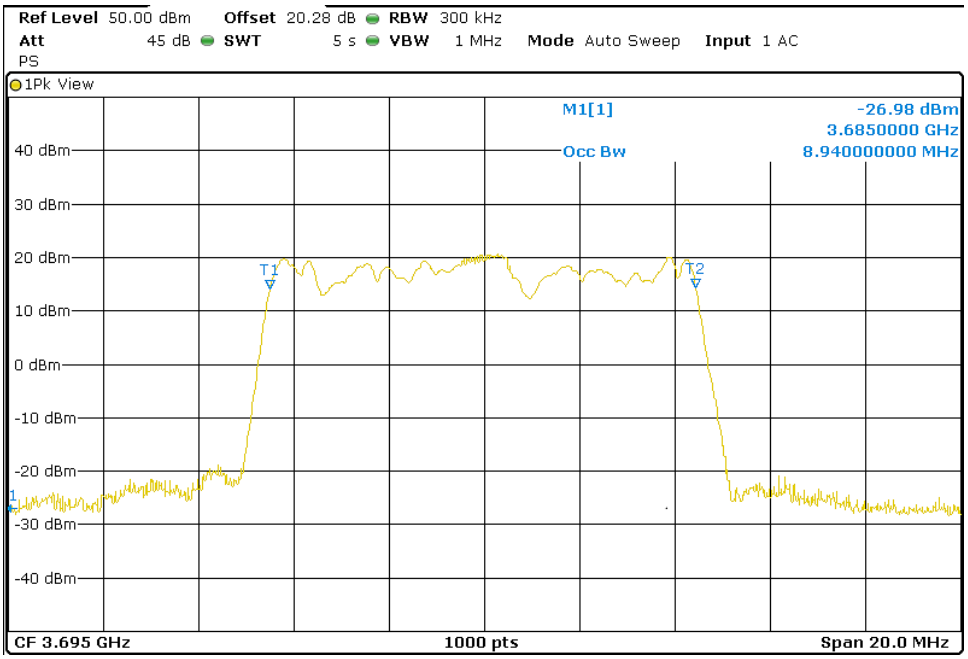


TEST RESULTS (Cont.):	

Middle Channel (3625 MHz)



High Channel (3695 MHz)

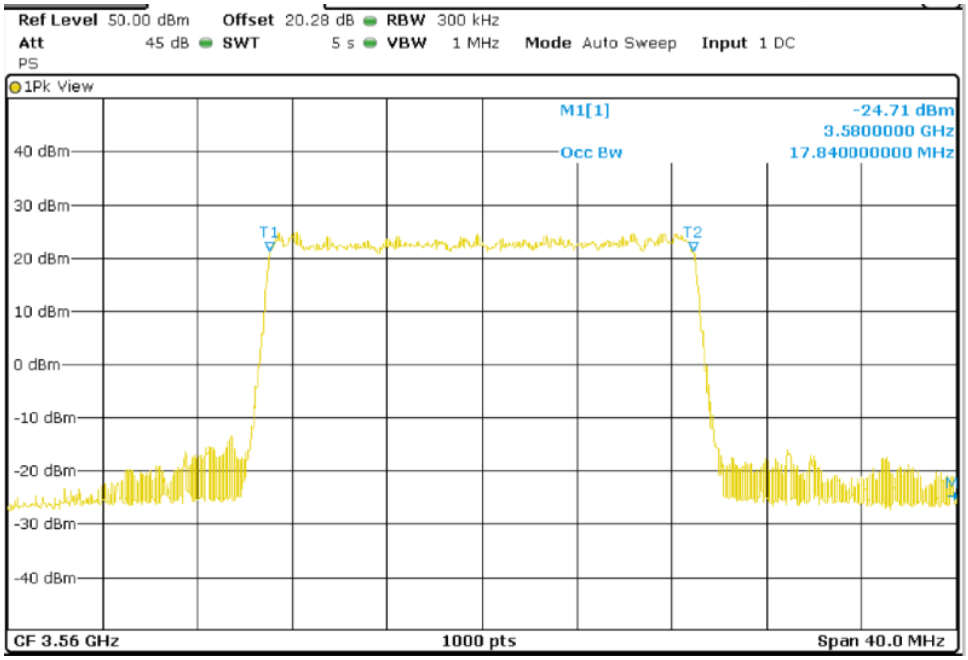


TEST RESULTS (Cont.):	

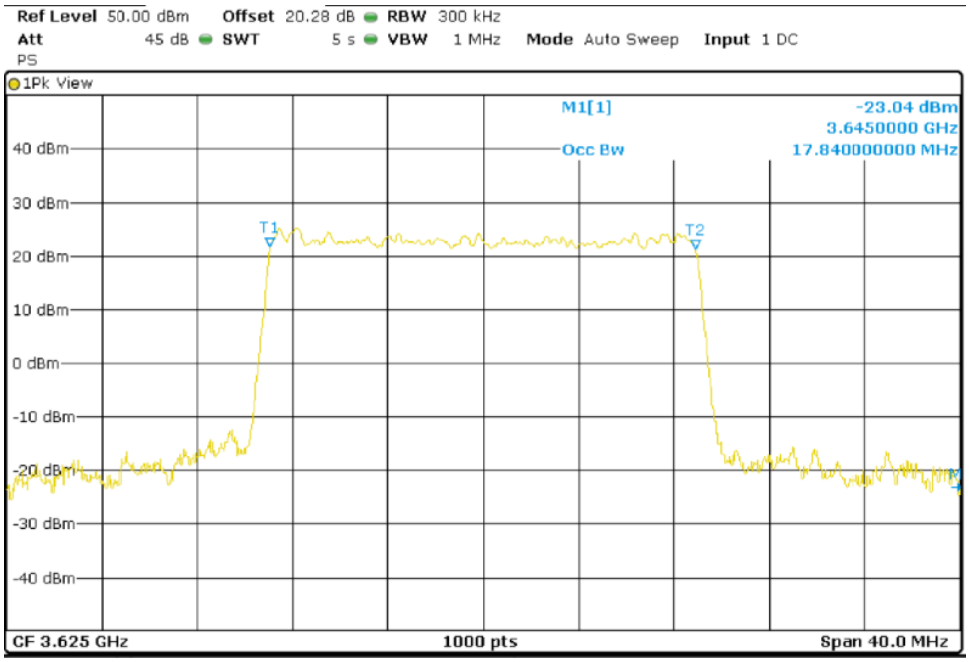
20 MHz BW

QPSK

Lowest Channel (3560 MHz)

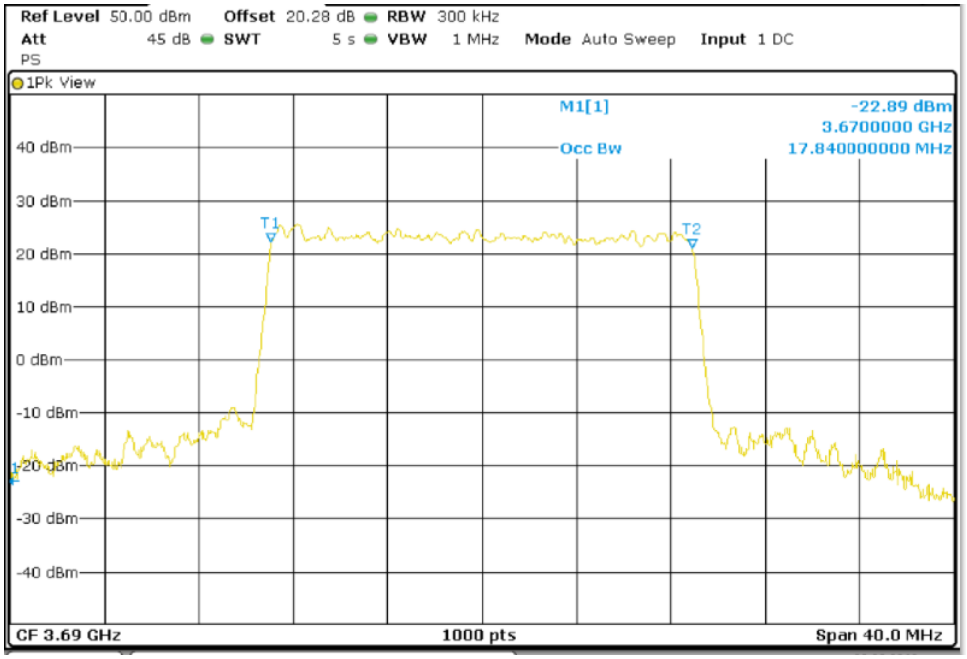


Middle Channel (3625 MHz)



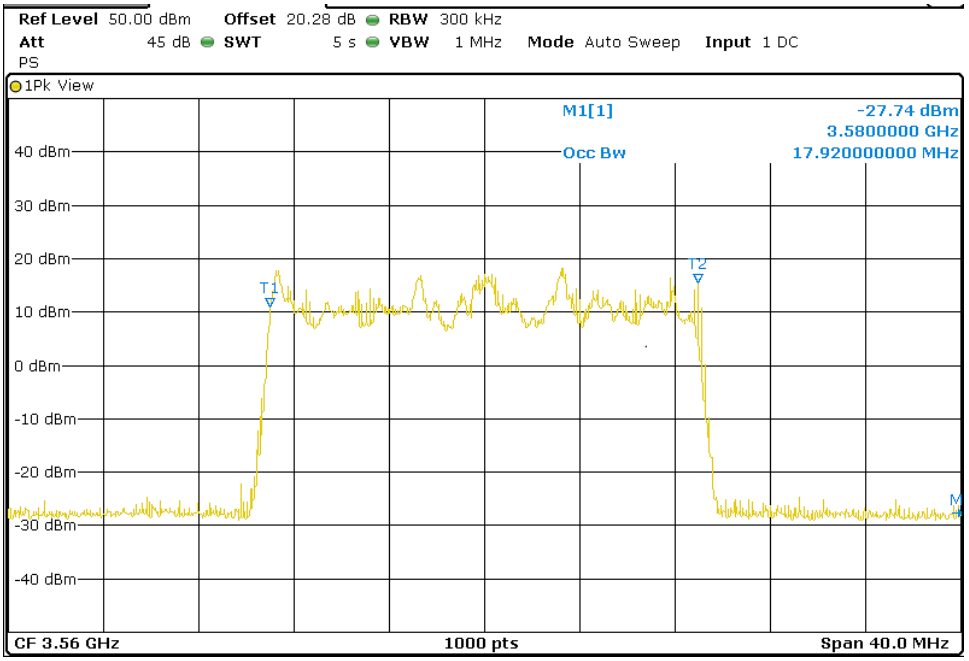
TEST RESULTS (Cont.):	

High Channel (3690 MHz)



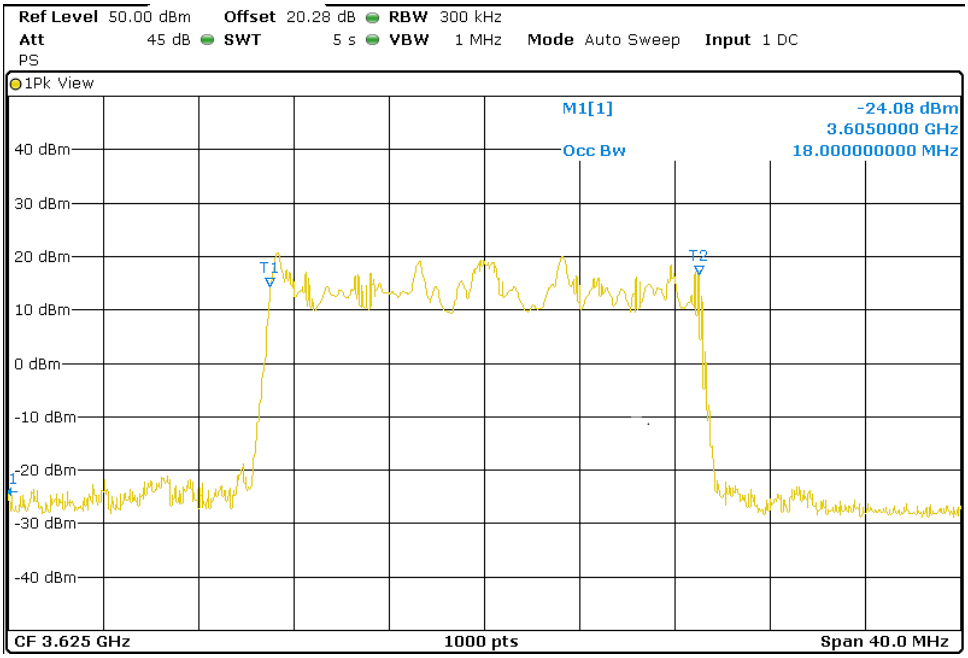
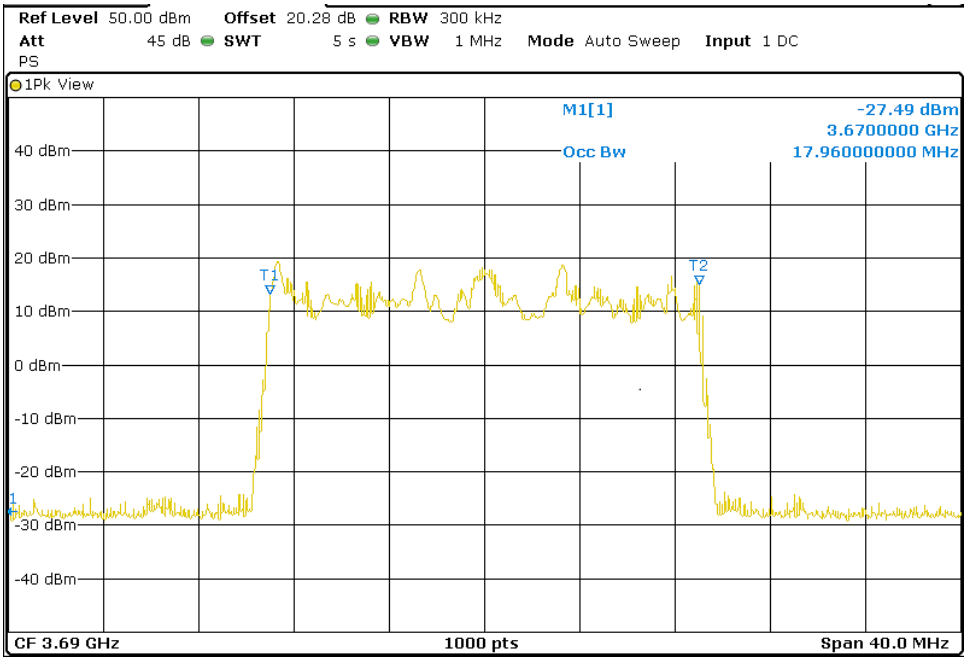
64QAM

Lowest Channel (3560 MHz)



TEST RESULTS (Cont.):	

Middle Channel (3625 MHz)



High Channel (3690 MHz)