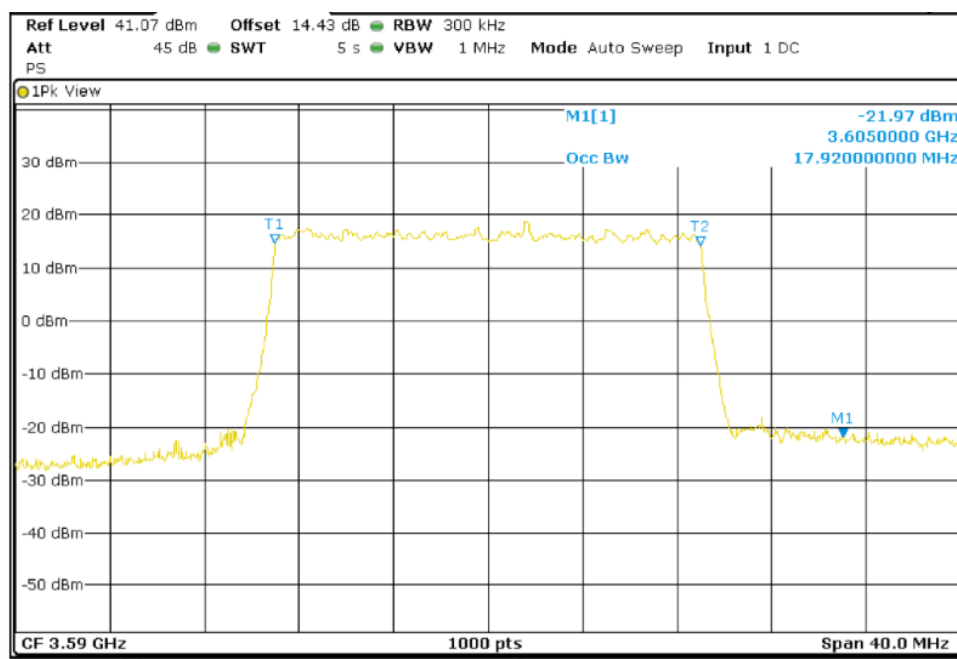
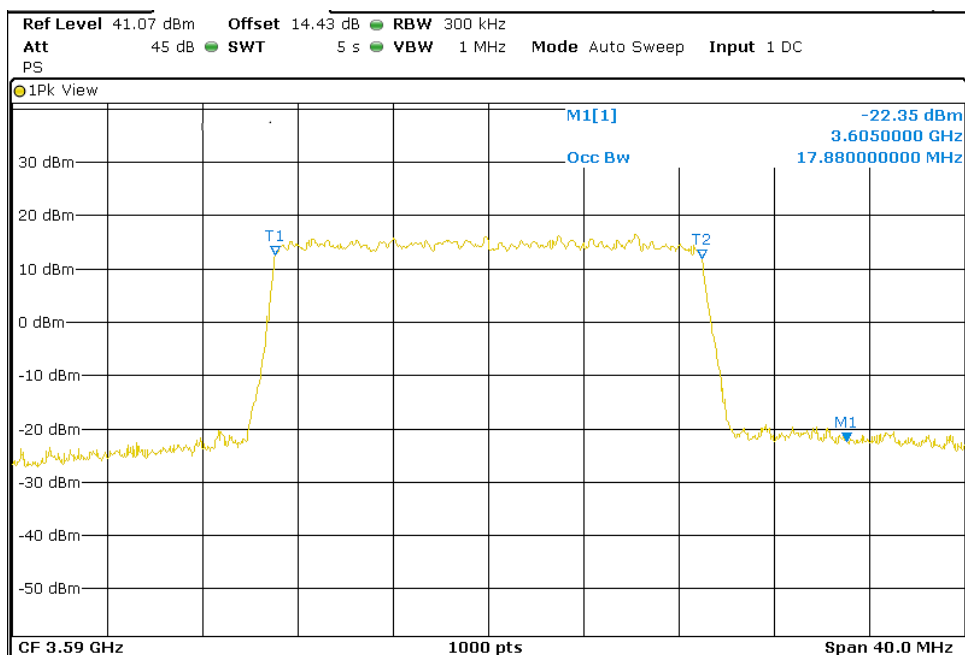


TEST RESULTS (Cont.):

High Channel (3590 MHz) QPSK



High Channel (3590 MHz) 16QAM

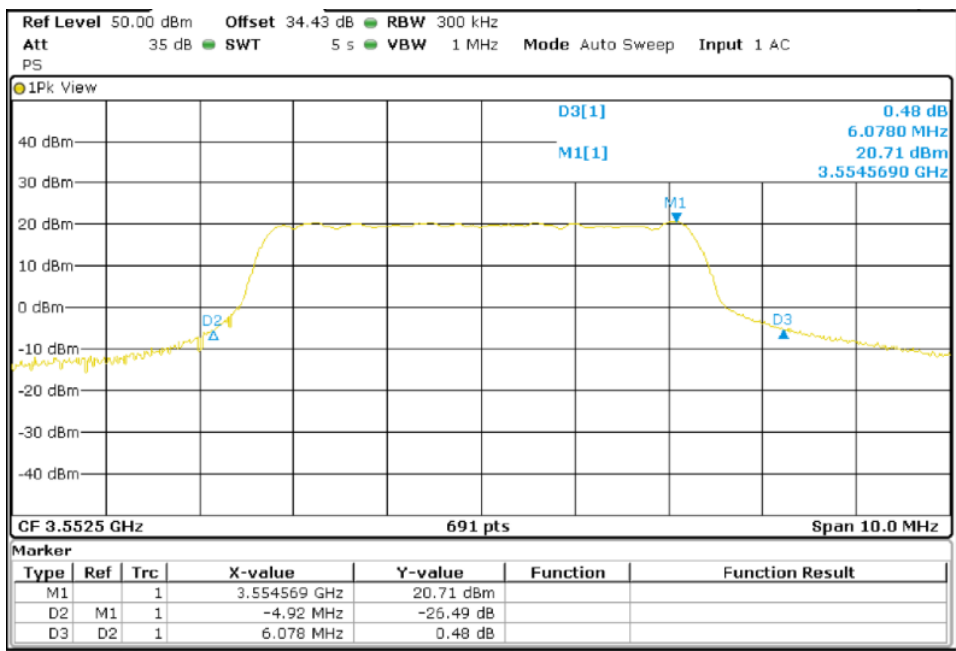


TEST RESULTS (Cont.):

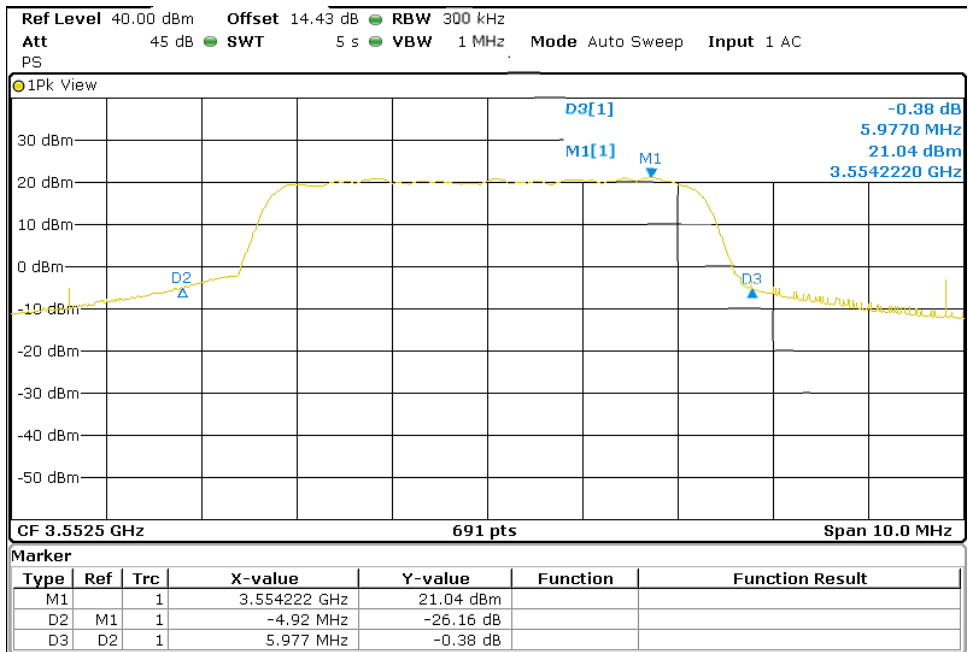
-26 dB BW

5 MHz BW

Lowest Channel (3552.5 MHz) QPSK



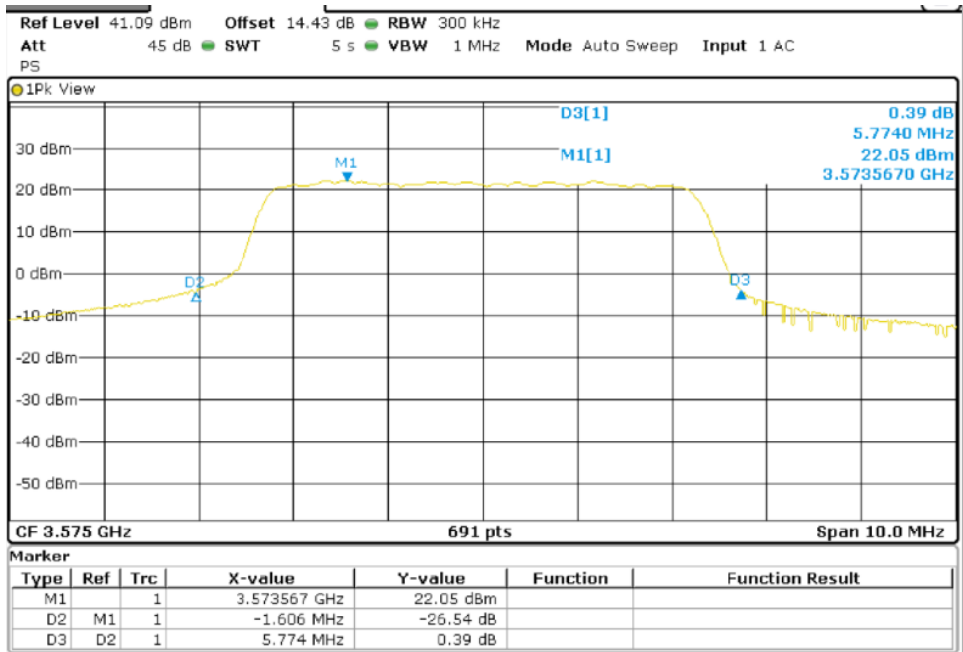
Lowest Channel (3552.5 MHz) 16QAM



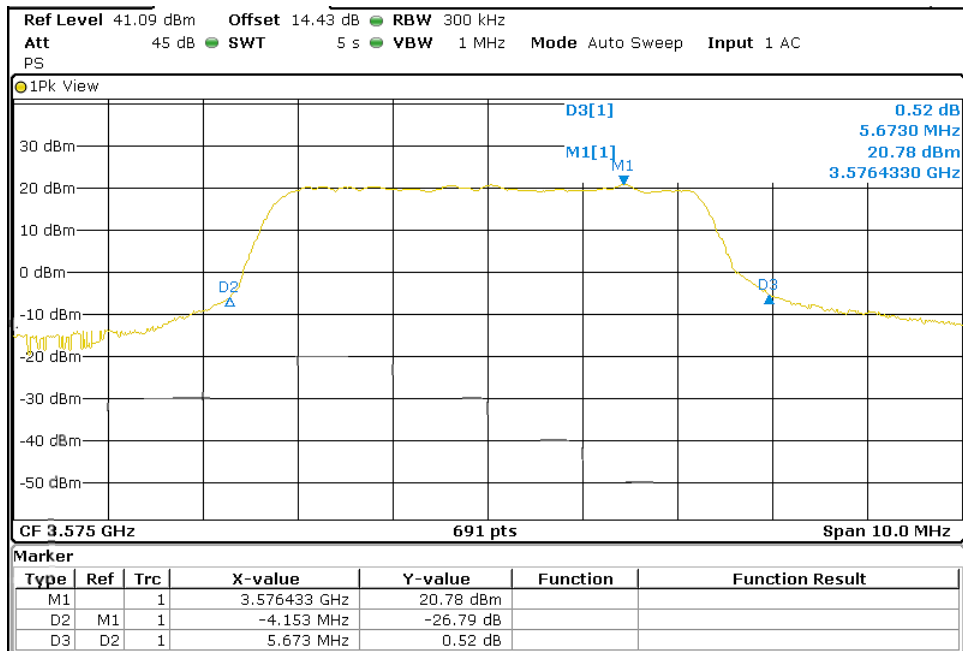
TEST RESULTS (Cont.):

-26dB Bandwidth

Middle Channel (3575 MHz) QPSK

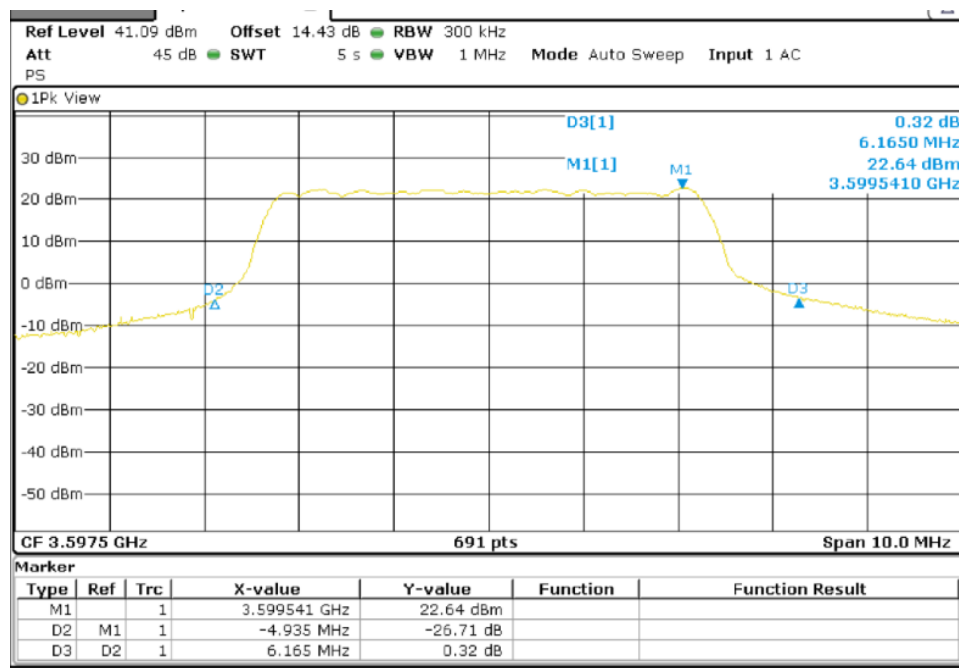


Middle Channel (3575 MHz) 16QAM

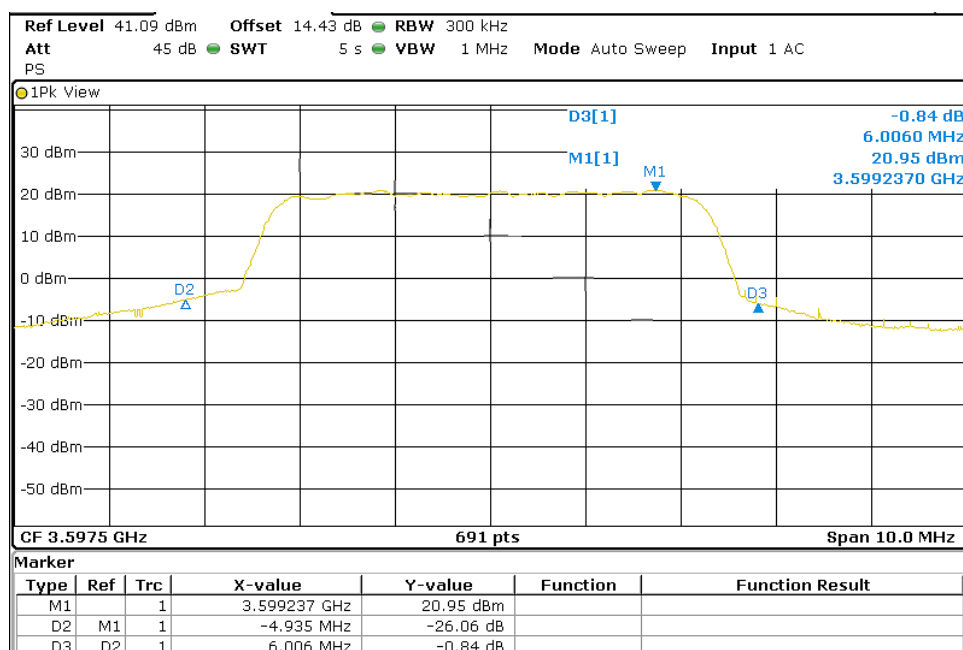


TEST RESULTS (Cont.):

Highest Channel (3597.5 MHz) QPSK



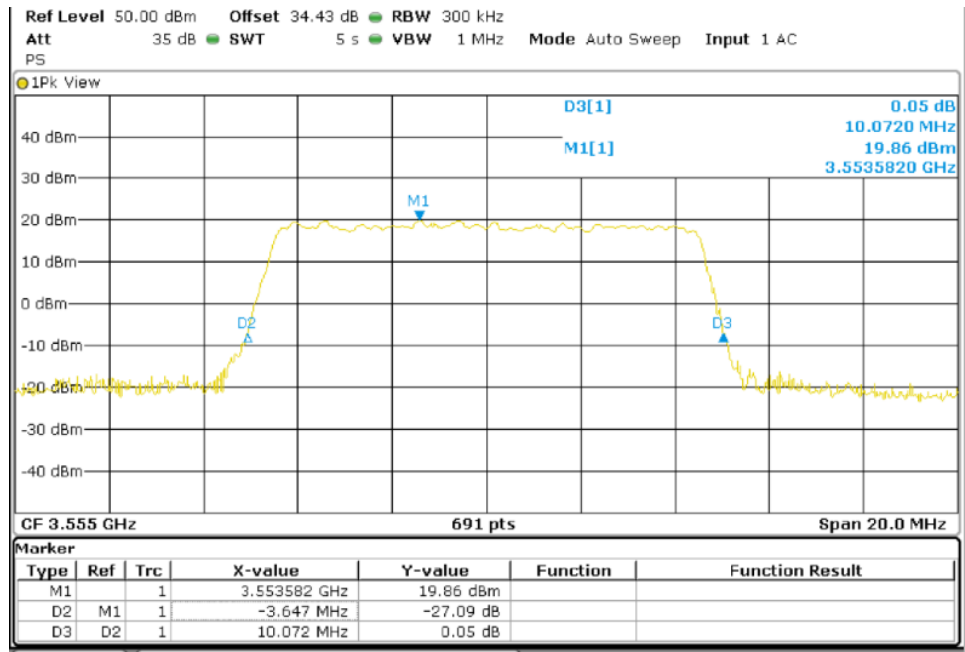
Highest Channel (3597.5 MHz) 16QAM



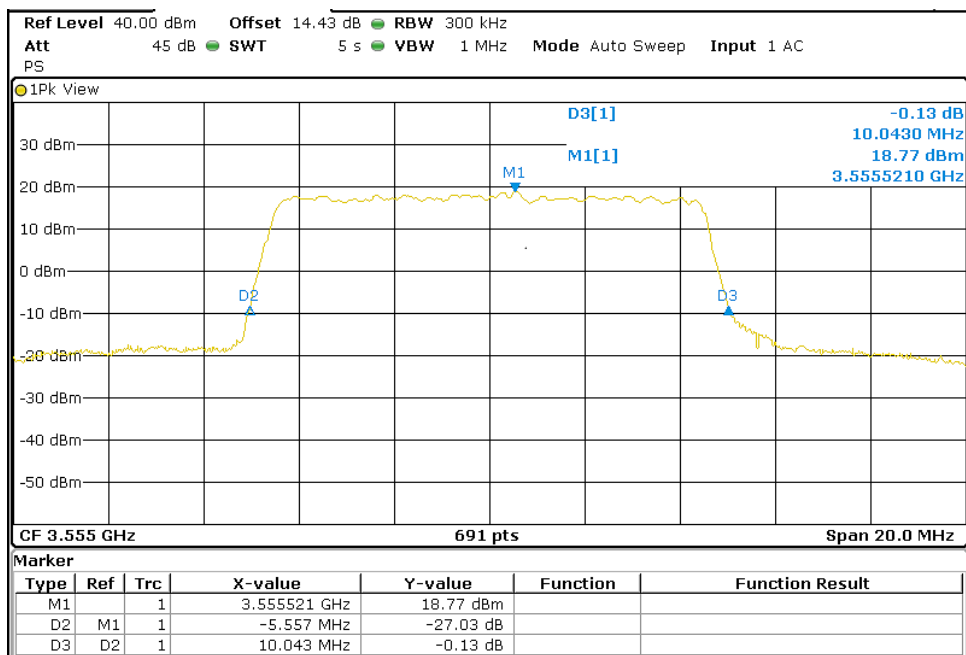
TEST RESULTS (Cont.):

10 MHz BW

Lowest Channel (3555 MHz) QPSK

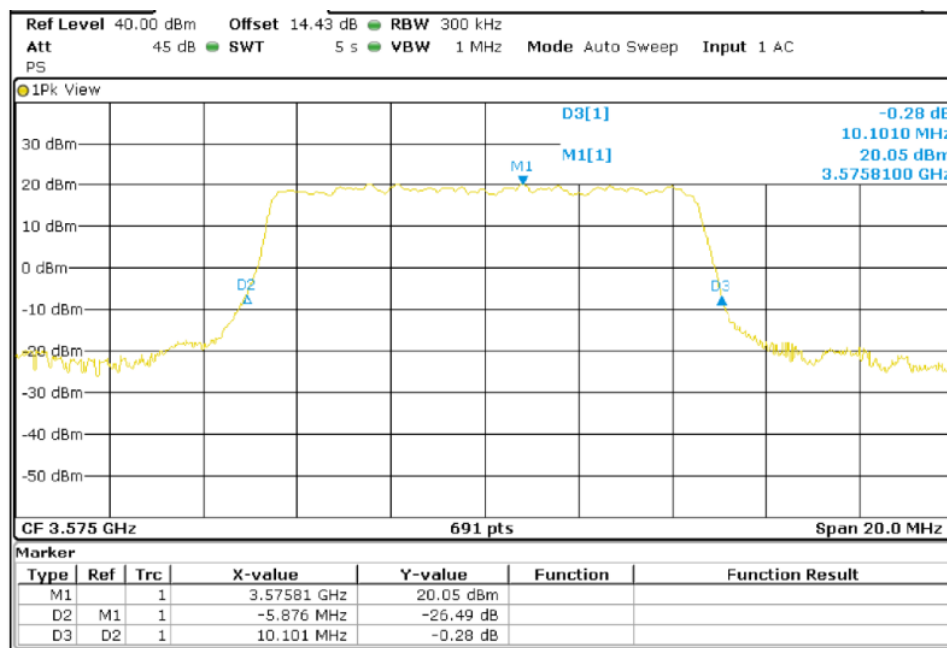


Lowest Channel (3555 MHz) 16QAM

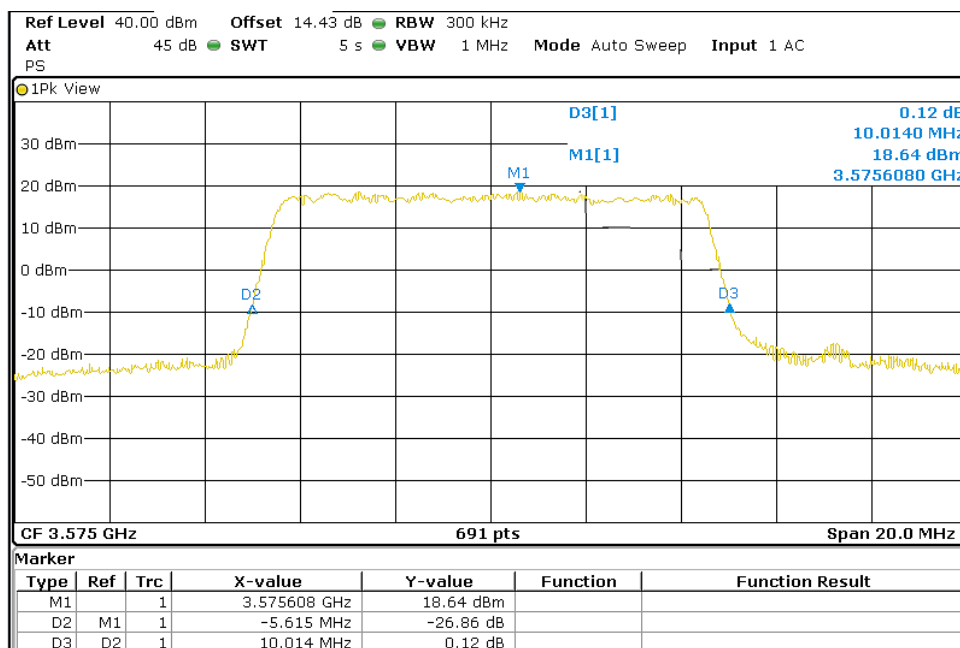


TEST RESULTS (Cont.):

Middle Channel (3575 MHz) QPSK

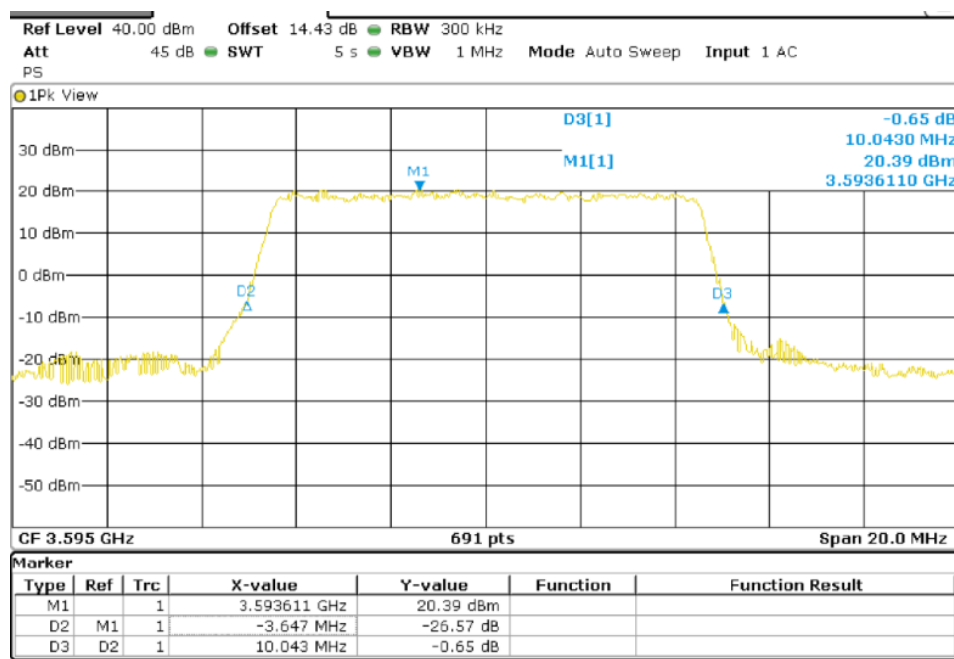


Middle Channel (3575 MHz) 16QAM

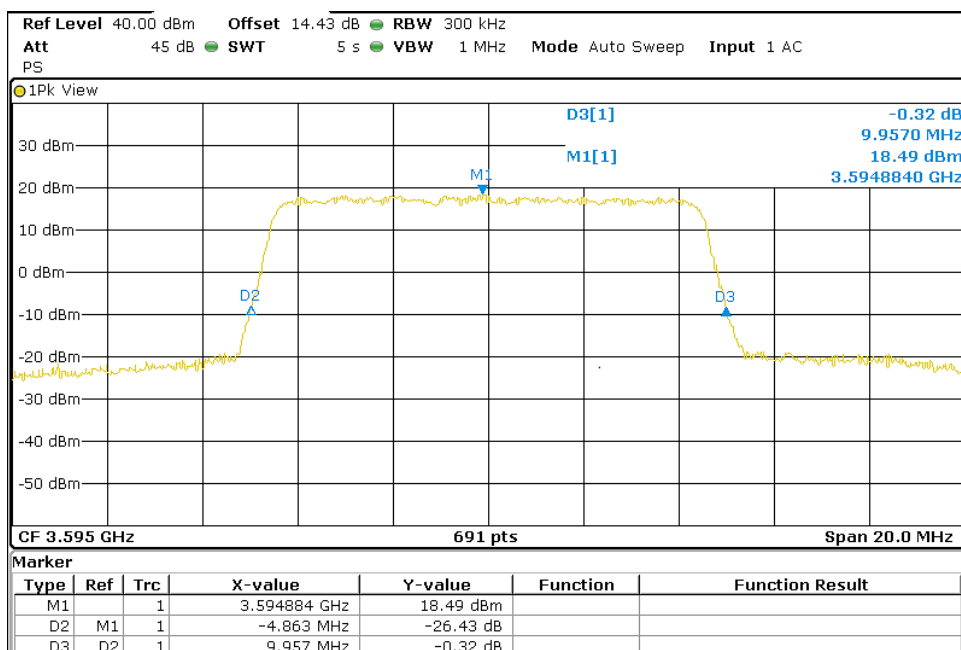


TEST RESULTS (Cont.):

High Channel (3595 MHz) QPSK



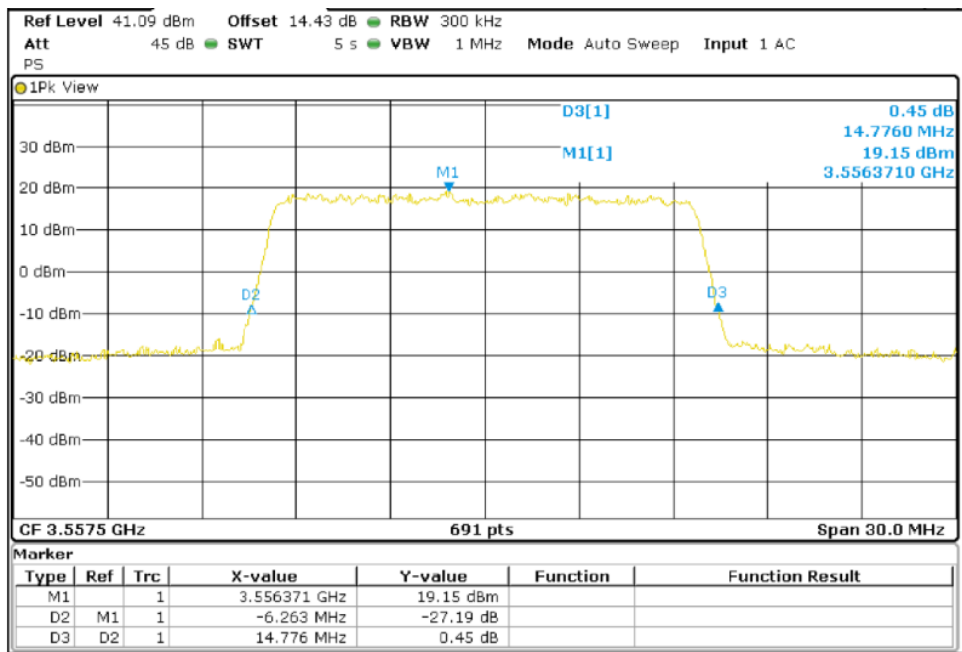
High Channel (3595 MHz) 16QAM



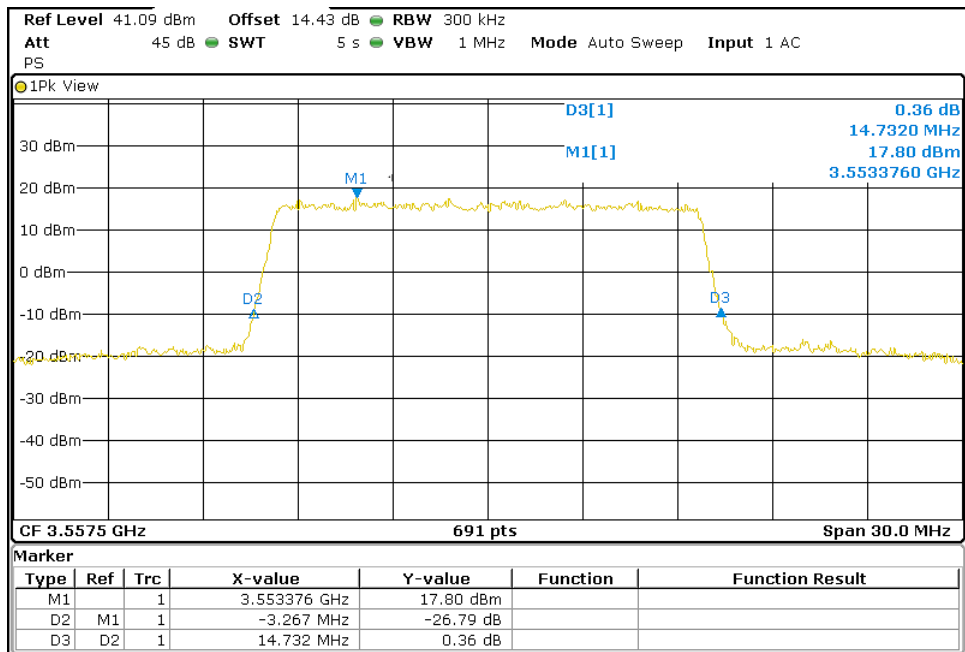
TEST RESULTS (Cont.):

15 MHz BW

Lowest Channel (3557.5 MHz) QPSK

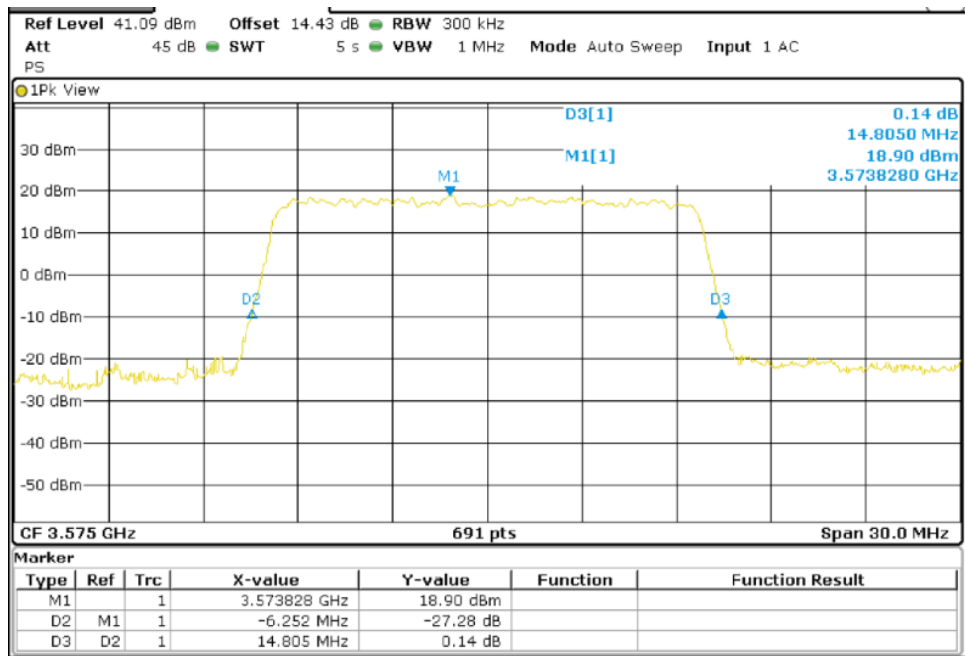


Lowest Channel (3557.5 MHz) 16QAM

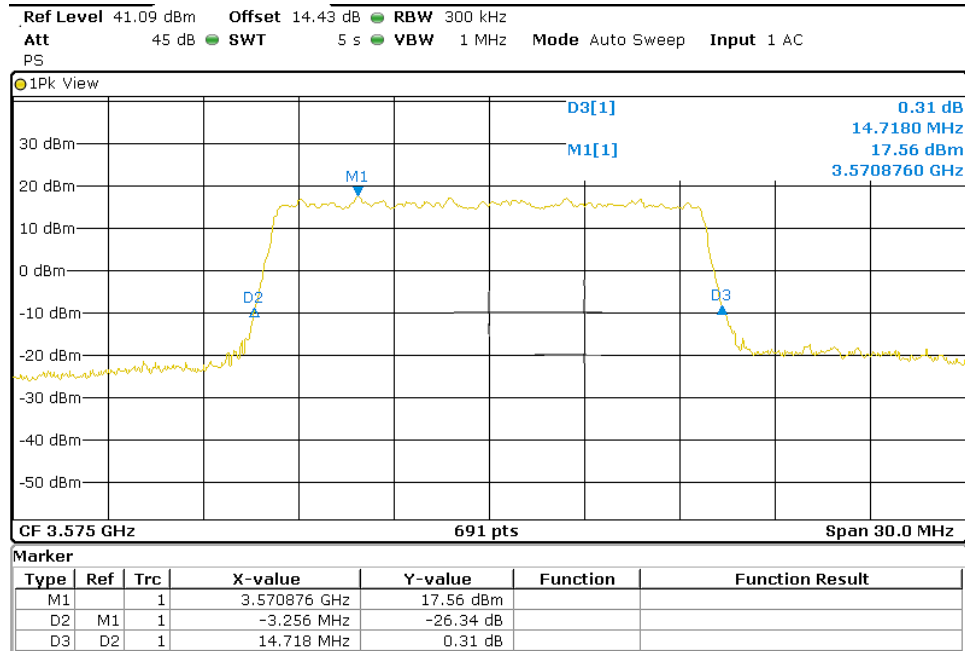


TEST RESULTS (Cont.):

Middle Channel (3575 MHz) QPSK

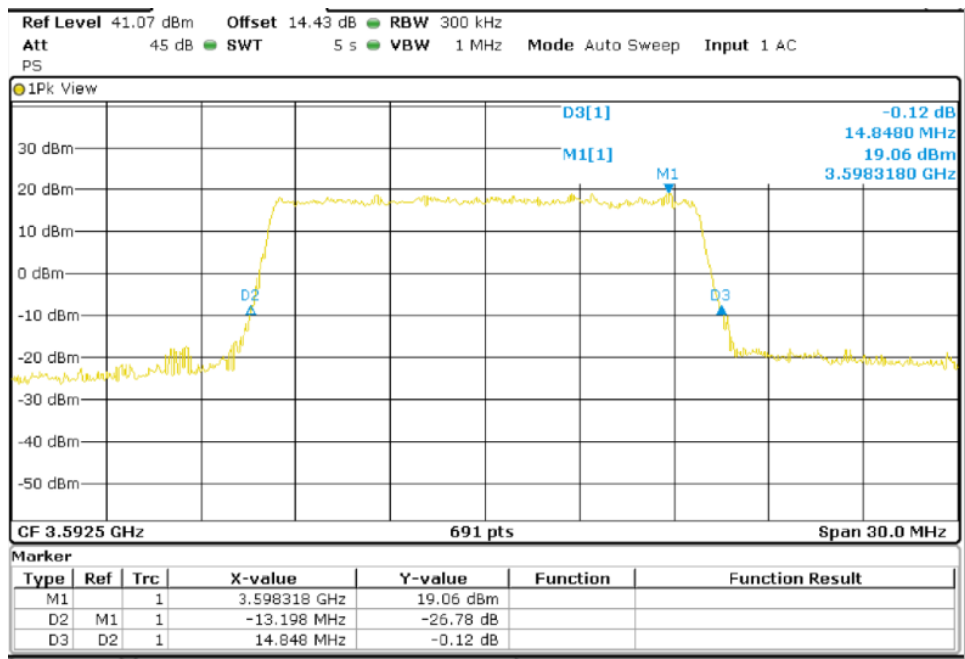


Middle Channel (3575 MHz) 16QAM

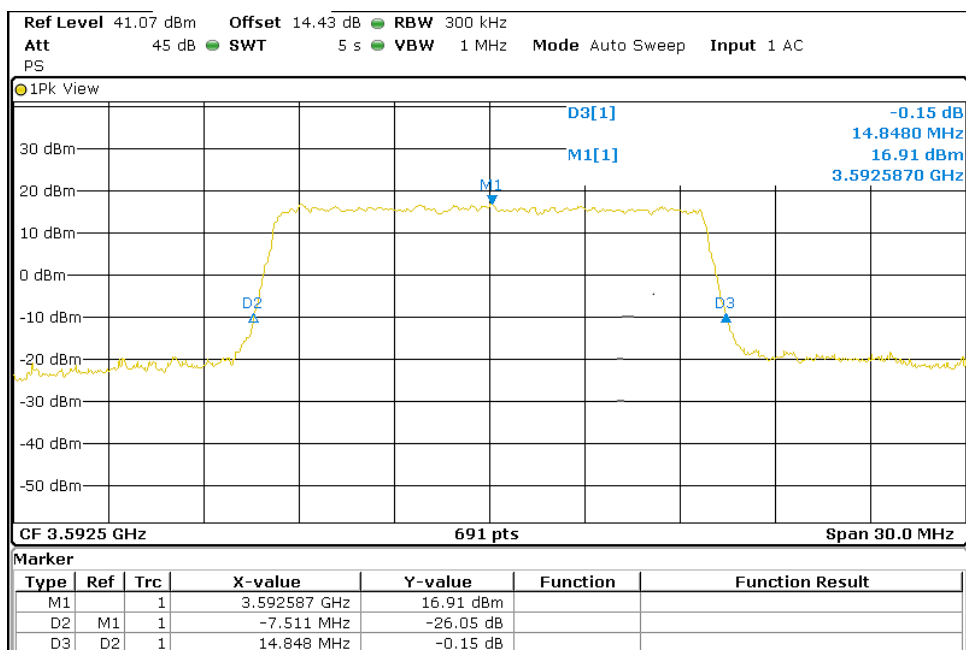


TEST RESULTS (Cont.):

Highest Channel (3592.5 MHz) QPSK



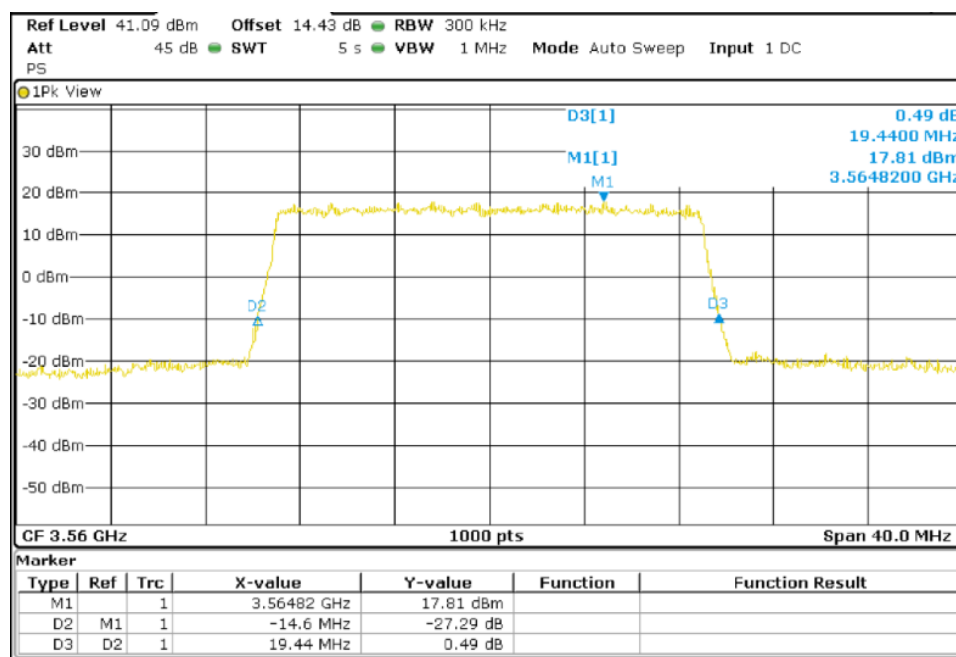
Highest Channel (3592.5 MHz) 16QAM



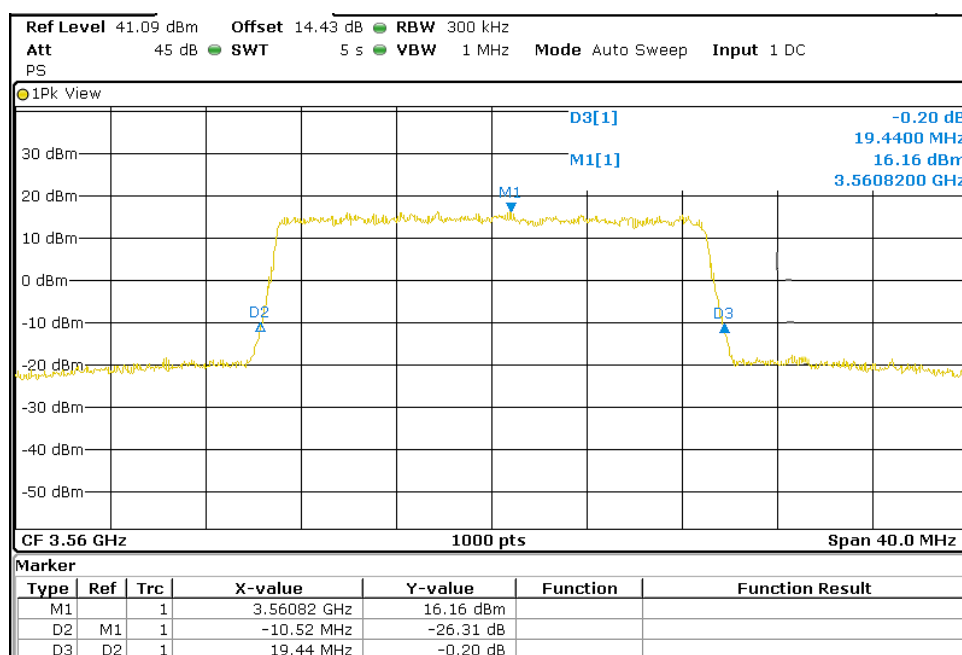
TEST RESULTS (Cont.):

20 MHz BW

Lowest Channel (3560 MHz) QPSK

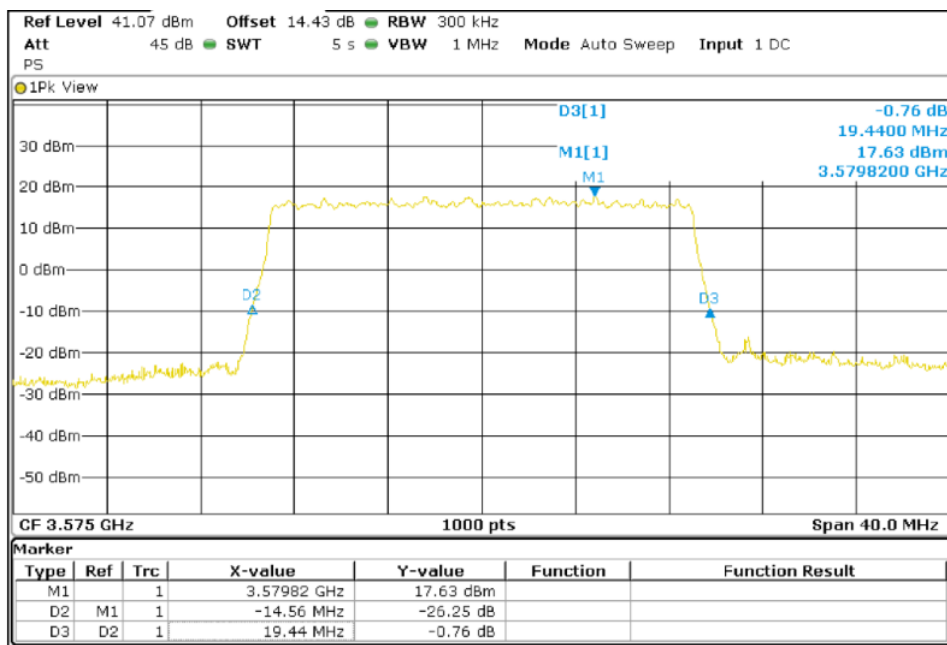


Lowest Channel (3560 MHz) 16QAM

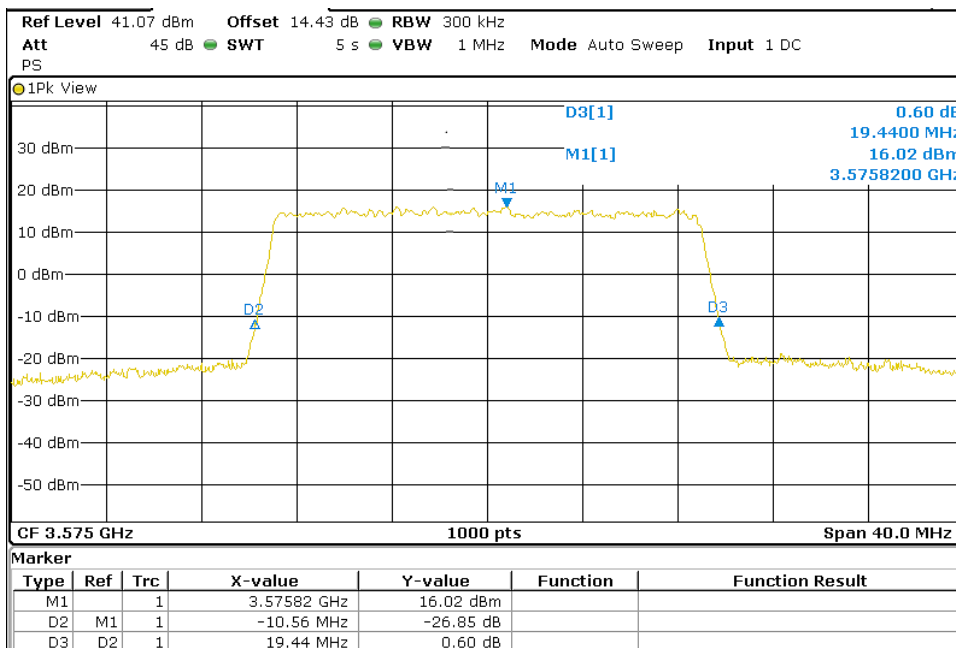


TEST RESULTS (Cont.):

Middle Channel (3575 MHz) QPSK

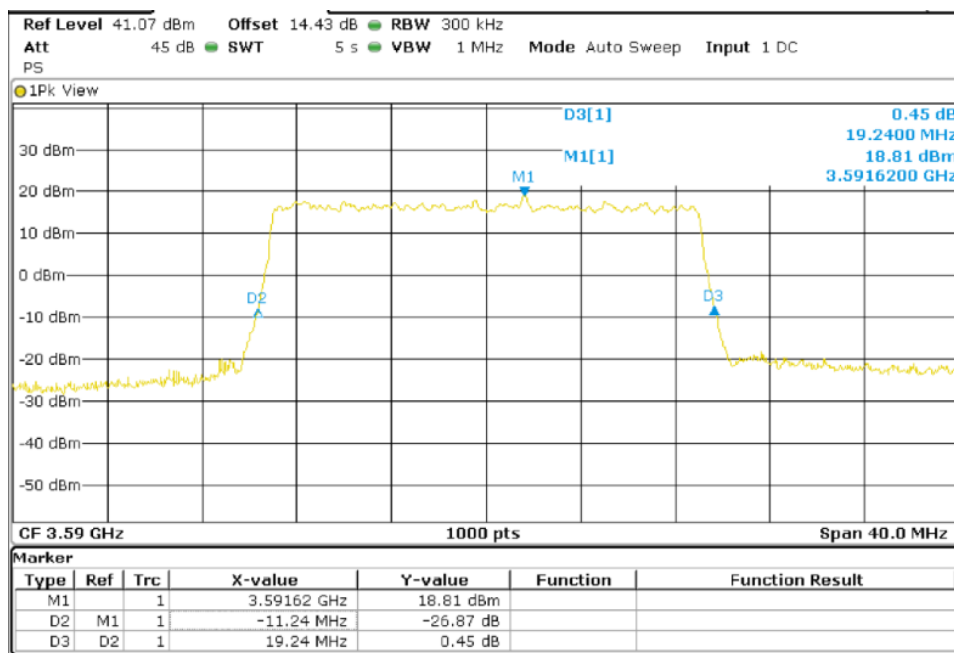


Middle Channel (3575 MHz) 16QAM

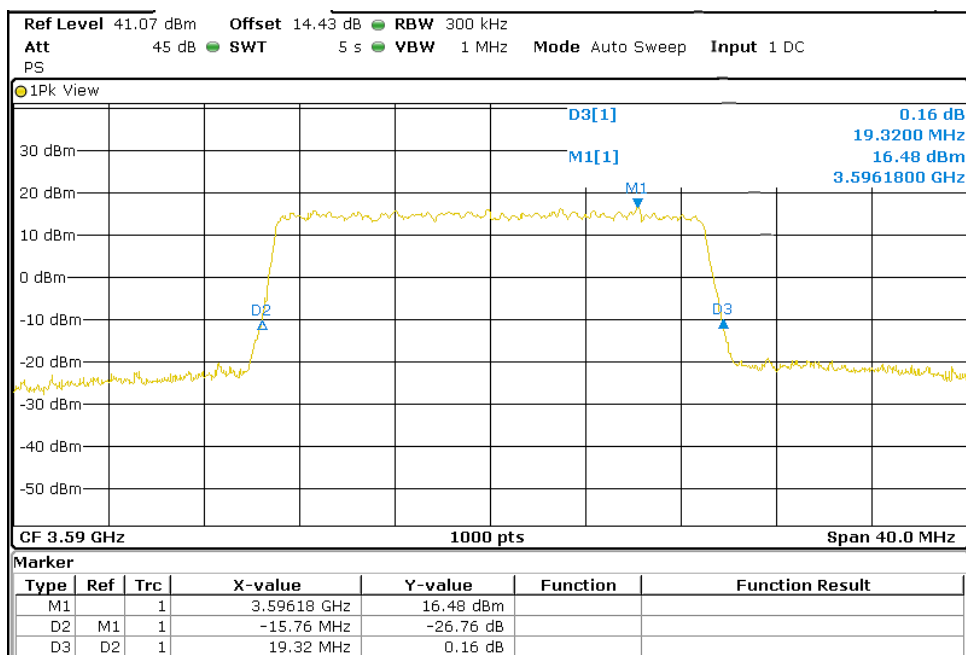


TEST RESULTS (Cont.):

High Channel (3590 MHz) QPSK



High Channel (3590 MHz) 16QAM



TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#03 (Band 43)
TEST RESULTS:	PASS

Results:

5 MHz BW

QPSK

	Lowest frequency 3602.5 MHz	Middle frequency 3650 MHz	Highest frequency 3697.5 MHz
99% OBW (MHz)	4.67	4.70	4.67
-26 dB Bandwidth (MHz)	5.96	6.05	5.72
Measurement uncertainty (kHz)	<±8.33		

16QAM

	Lowest frequency 3602.5 MHz	Middle frequency 3650 MHz	Highest frequency 3697.5 MHz
99% OBW (MHz)	4.67	4.69	4.66
-26 dB Bandwidth (MHz)	5.92	5.85	5.72
Measurement uncertainty (kHz)	<±8.33		

10 MHz BW

QPSK

	Lowest frequency 3605 MHz	Middle frequency 3650 MHz	Highest frequency 3695 MHz
99% OBW (MHz)	9.02	9.08	9.03
-26 dB Bandwidth (MHz)	10.06	10.16	10.07
Measurement uncertainty (kHz)	<±8.33		

16QAM

	Lowest frequency 3605 MHz	Middle frequency 3650 MHz	Highest frequency 3695 MHz
99% OBW (MHz)	9.00	9.04	9.00
-26 dB Bandwidth (MHz)	9.97	10.04	9.96
Measurement uncertainty (kHz)	<±8.33		

TEST RESULTS (Cont.):

15 MHz BW

QPSK

	Lowest frequency 3607.5 MHz	Middle frequency 3650 MHz	Highest frequency 3692.5 MHz
99% OBW (MHz)	13.41	13.41	13.45
-26 dB Bandwidth (MHz)	14.72	14.81	14.73
Measurement uncertainty (kHz)	<±8.33		

16QAM

	Lowest frequency 3607.5 MHz	Middle frequency 3650 MHz	Highest frequency 3692.5 MHz
99% OBW (MHz)	13.50	13.44	13.55
-26 dB Bandwidth (MHz)	14.85	14.81	14.82
Measurement uncertainty (kHz)	<±8.33		

20 MHz BW

QPSK

	Lowest frequency 3610 MHz	Middle frequency 3650 MHz	Highest frequency 3690 MHz
99% OBW (MHz)	17.84	17.84	17.88
-26 dB Bandwidth (MHz)	19.28	19.44	19.32
Measurement uncertainty (kHz)	<±8.33		

16QAM

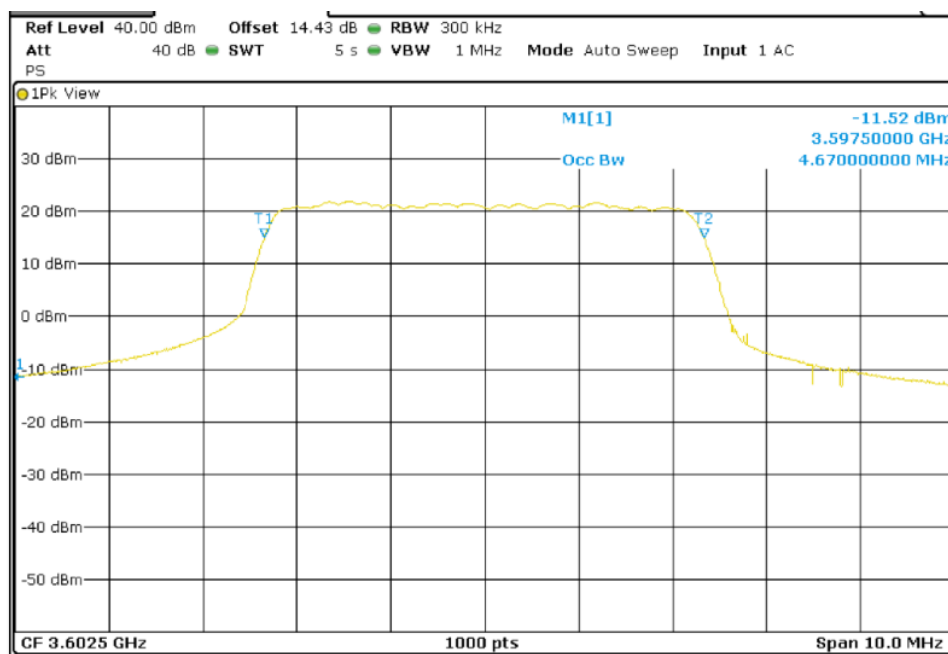
	Lowest frequency 3610 MHz	Middle frequency 3650 MHz	Highest frequency 3690 MHz
99% OBW (MHz)	17.88	17.88	17.88
-26 dB Bandwidth (MHz)	19.36	19.48	19.36
Measurement uncertainty (kHz)	<±8.33		

Verdict: PASS
(See next plots)

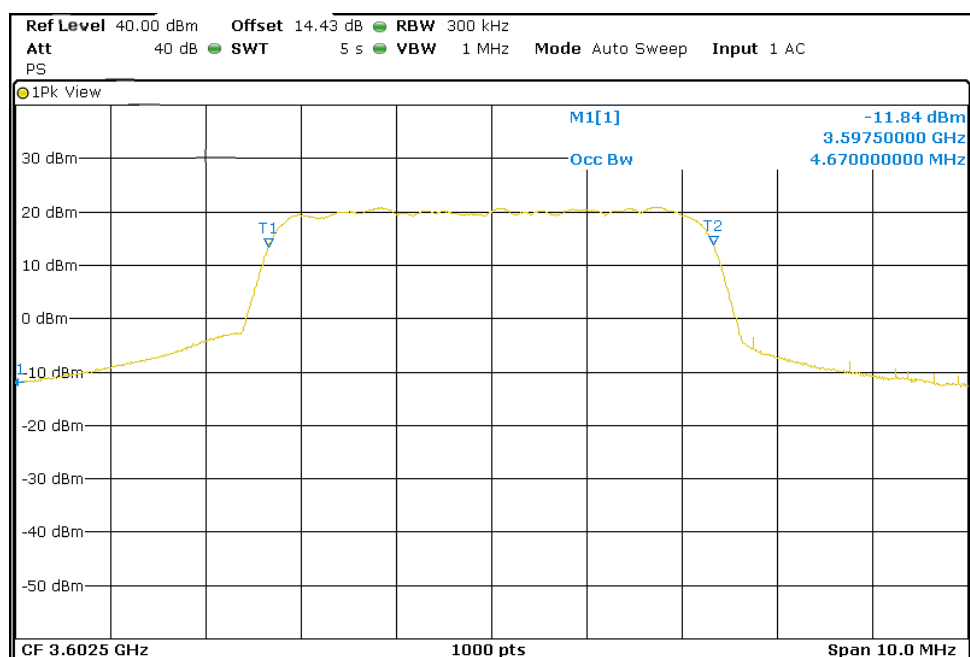
TEST RESULTS (Cont.):

5 MHz BW

Lowest Channel (3602.5 MHz) QPSK

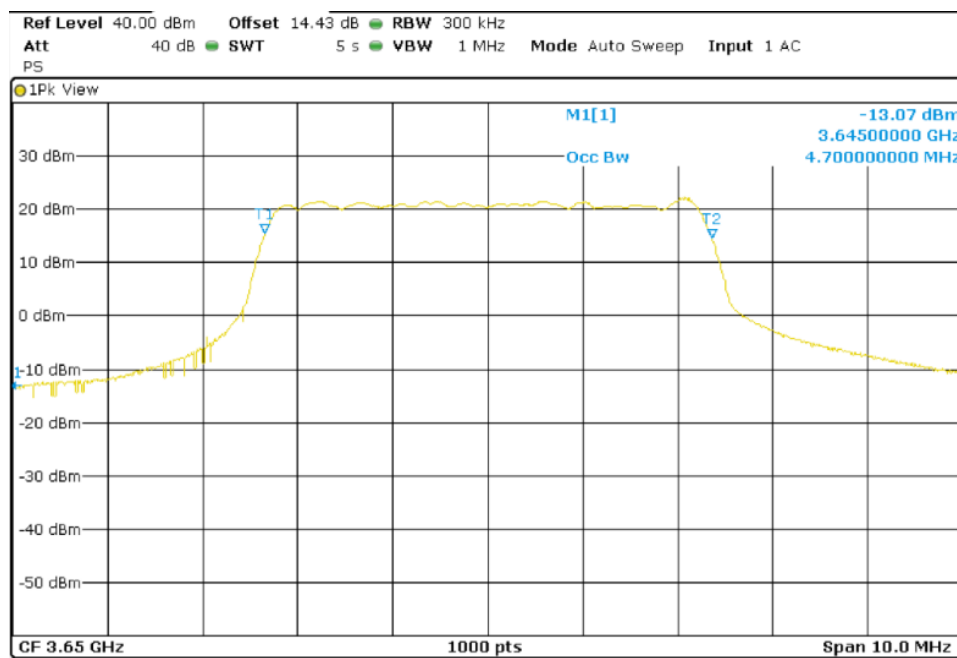


Lowest Channel (3602.5 MHz) 16QAM

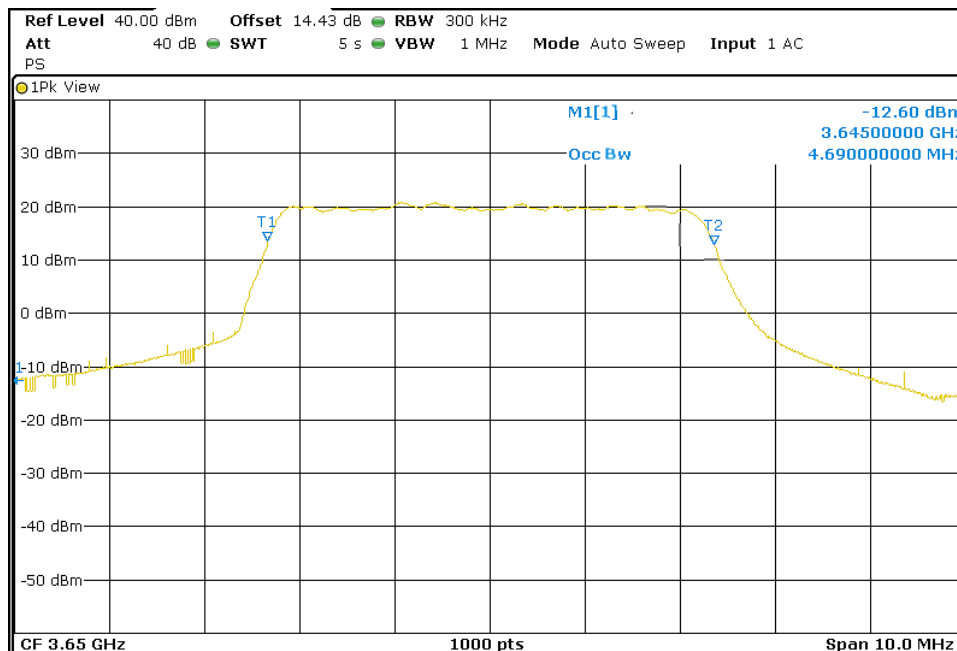


TEST RESULTS (Cont.):

Middle Channel (3650 MHz) QPSK

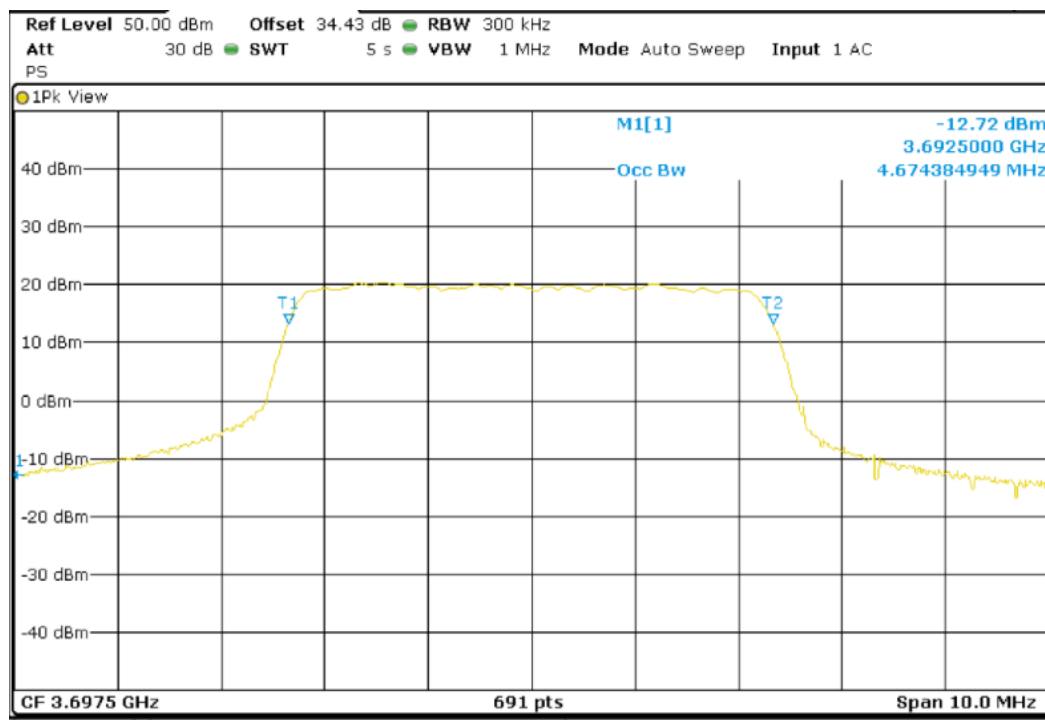


Middle Channel (3650 MHz) 16QAM

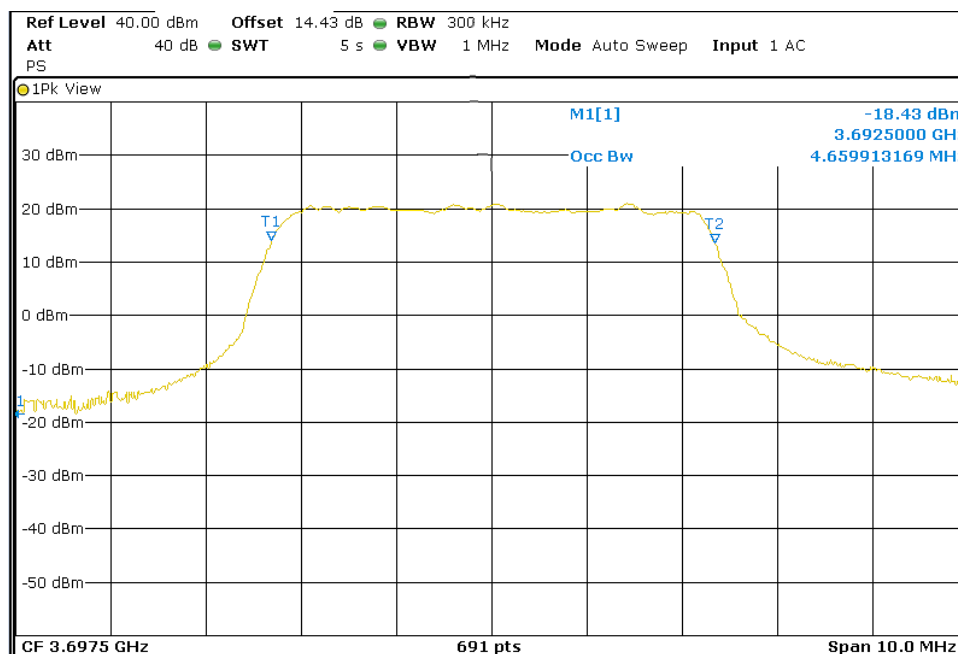


TEST RESULTS (Cont.):

Highest Channel (3697.5 MHz) QPSK



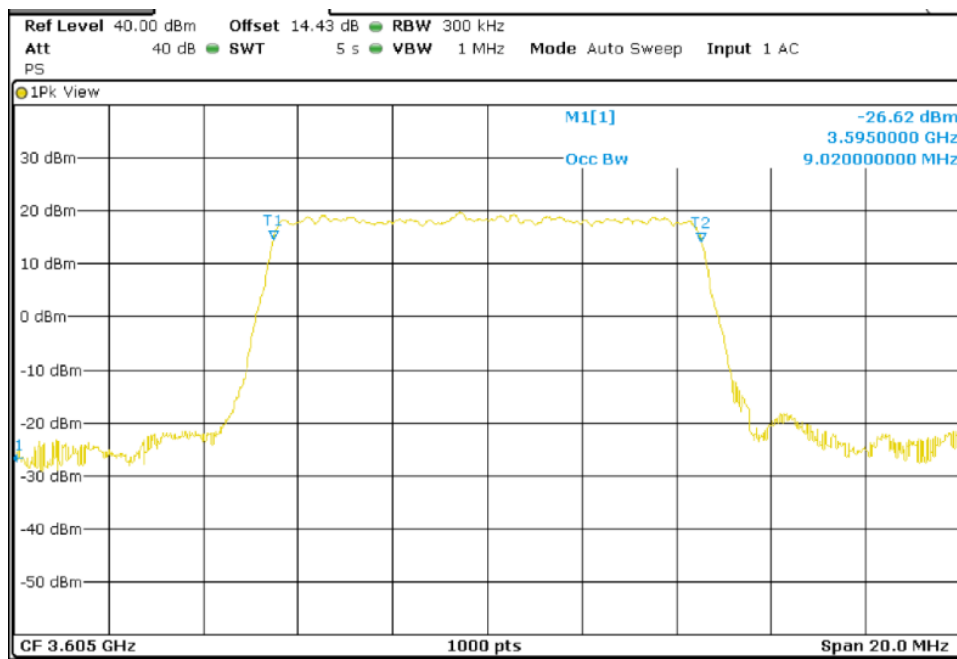
Highest Channel (3697.5 MHz) 16QAM



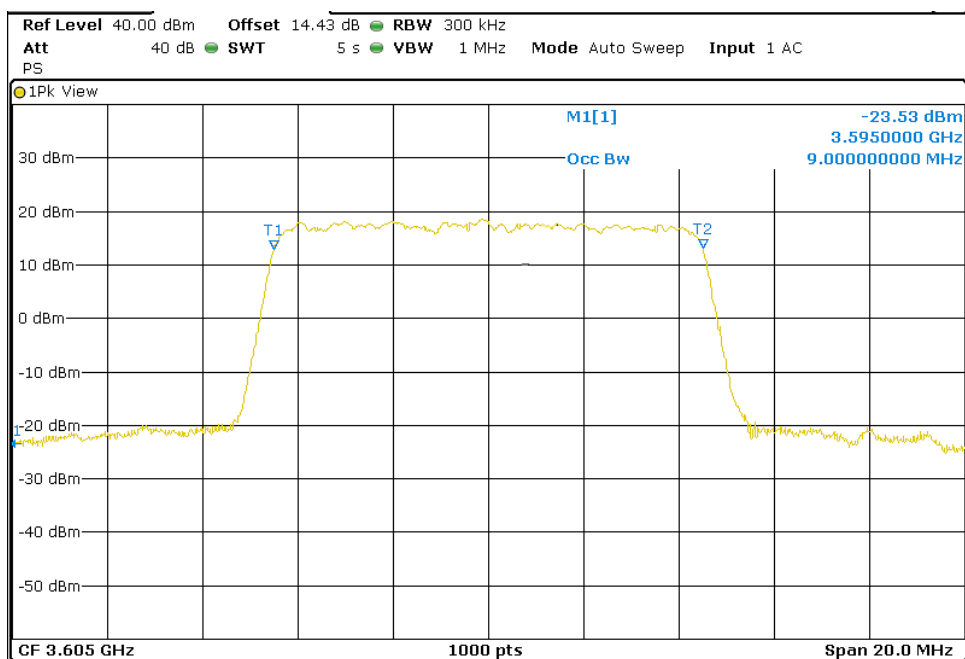
TEST RESULTS (Cont.):

10 MHz BW

Lowest Channel (3605 MHz) QPSK

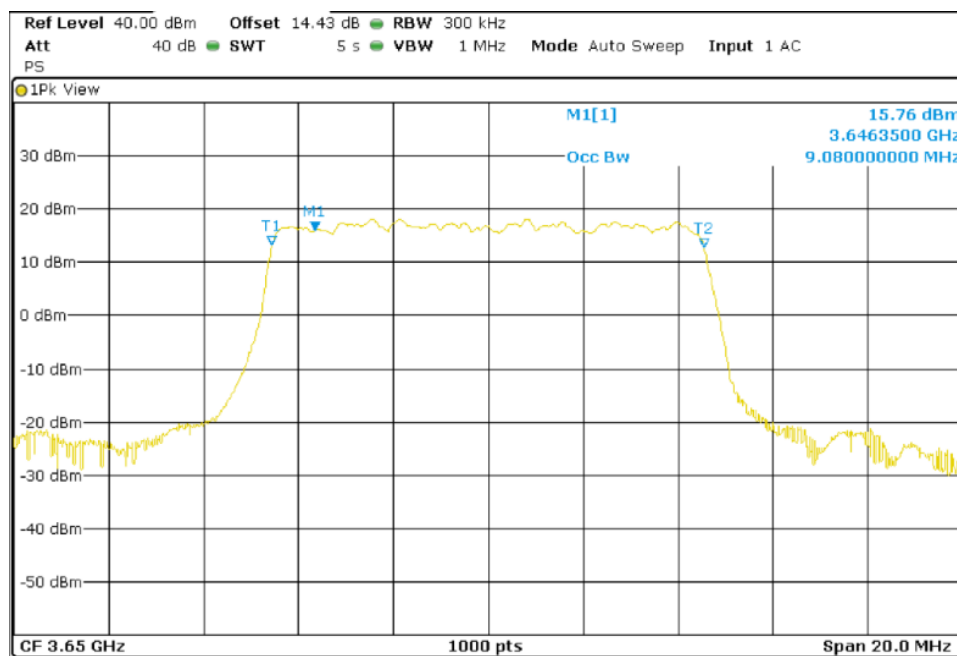


Lowest Channel (3605 MHz) 16QAM

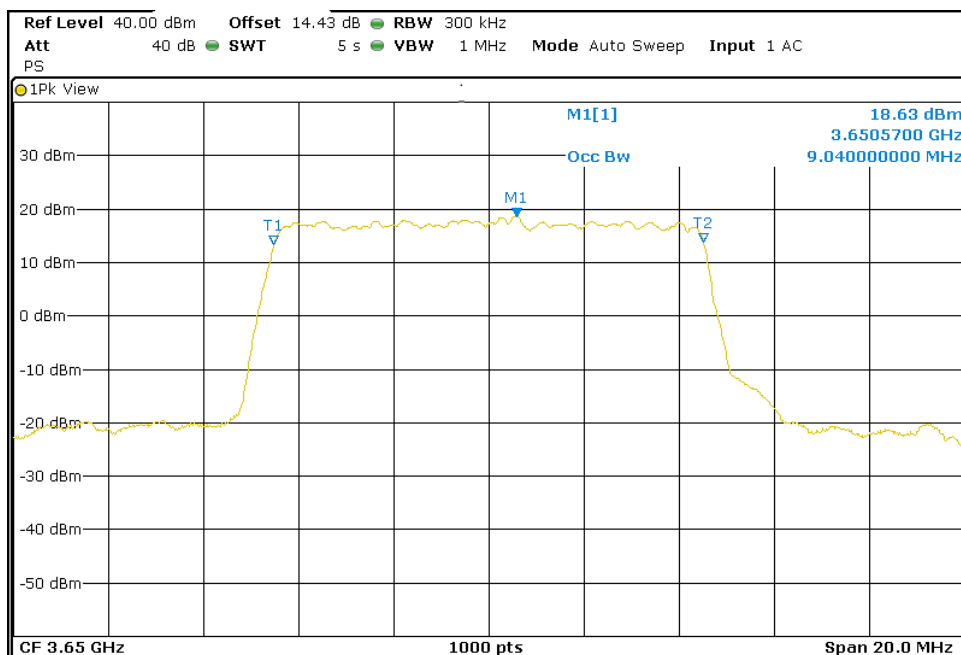


TEST RESULTS (Cont.):

Middle Channel (3650 MHz) QPSK



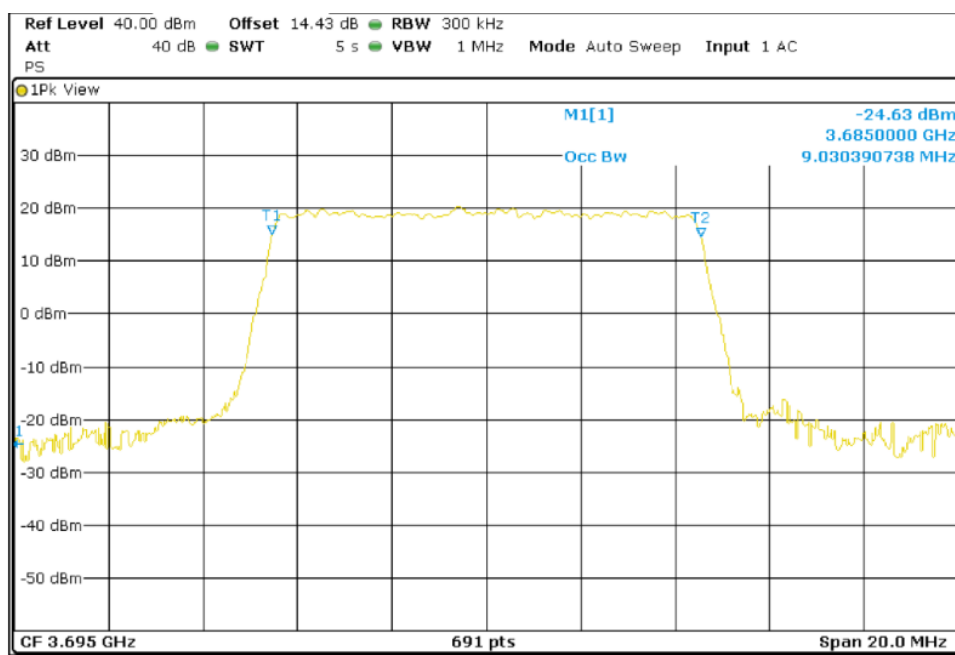
Middle Channel (3650 MHz) 16QAM



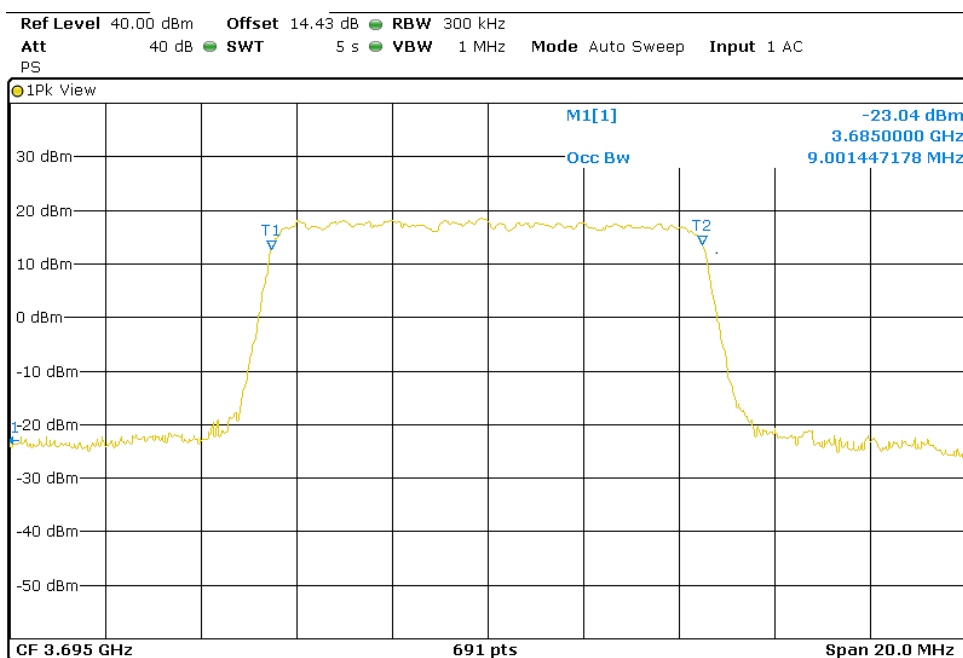
TEST RESULTS (Cont.):

99% OBW

High Channel (3695 MHz) QPSK



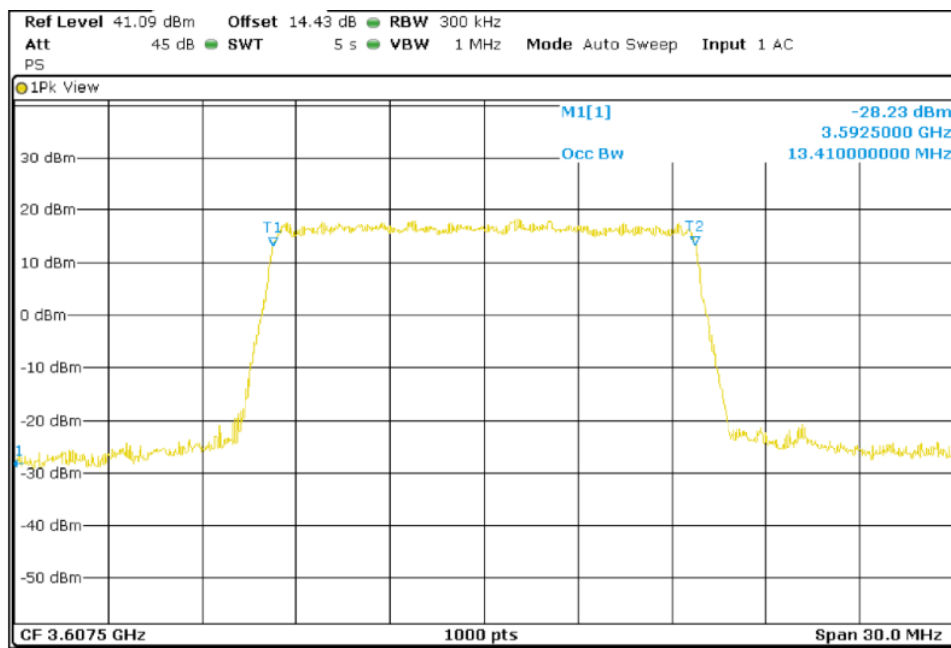
High Channel (3695 MHz) 16QAM



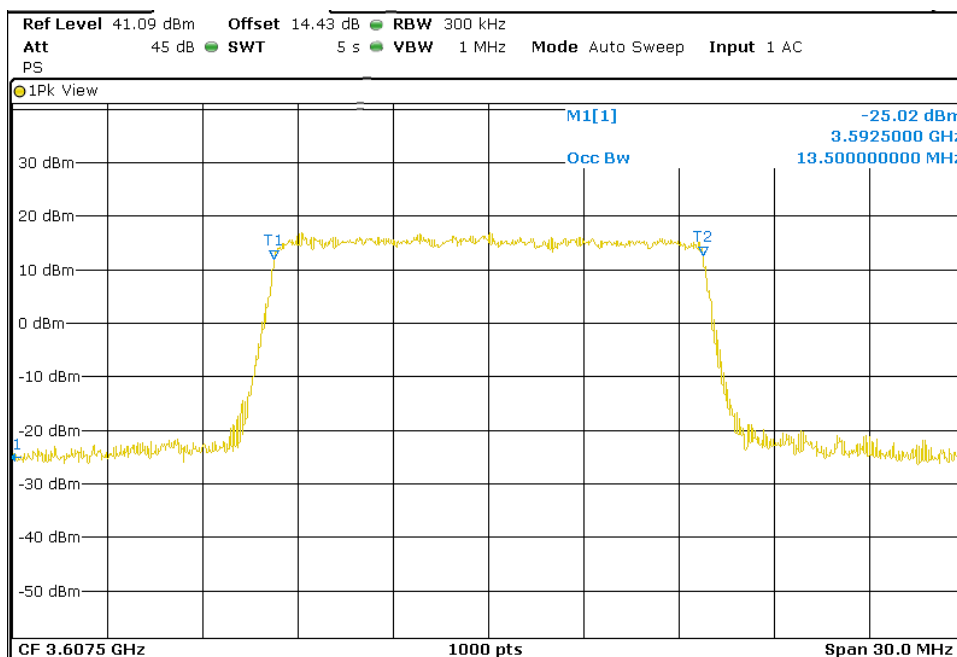
TEST RESULTS (Cont.):

15 MHz BW

Lowest Channel (3607.5 MHz) QPSK

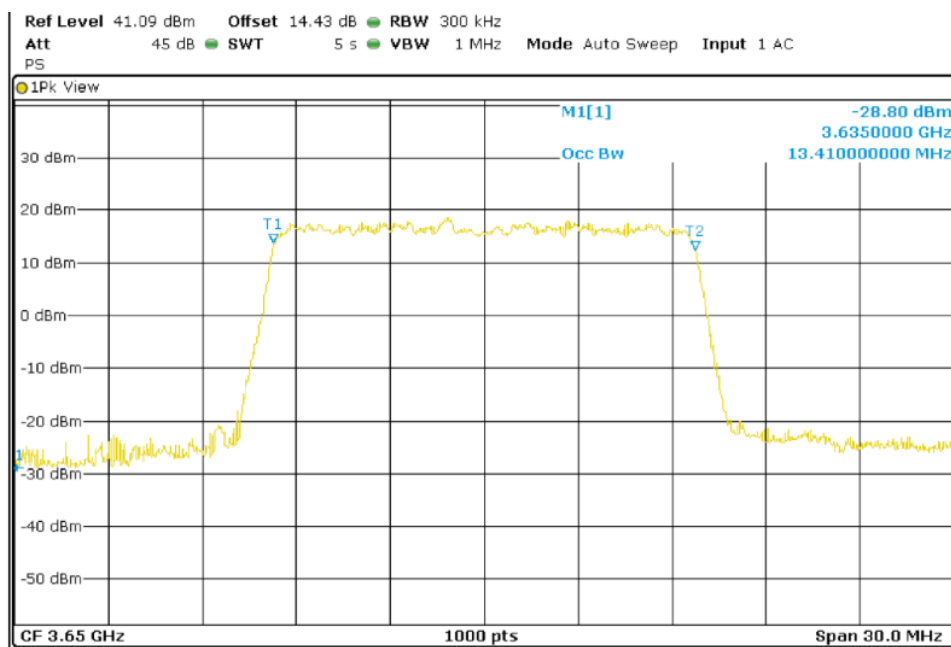


Lowest Channel (3607.5 MHz) 16QAM

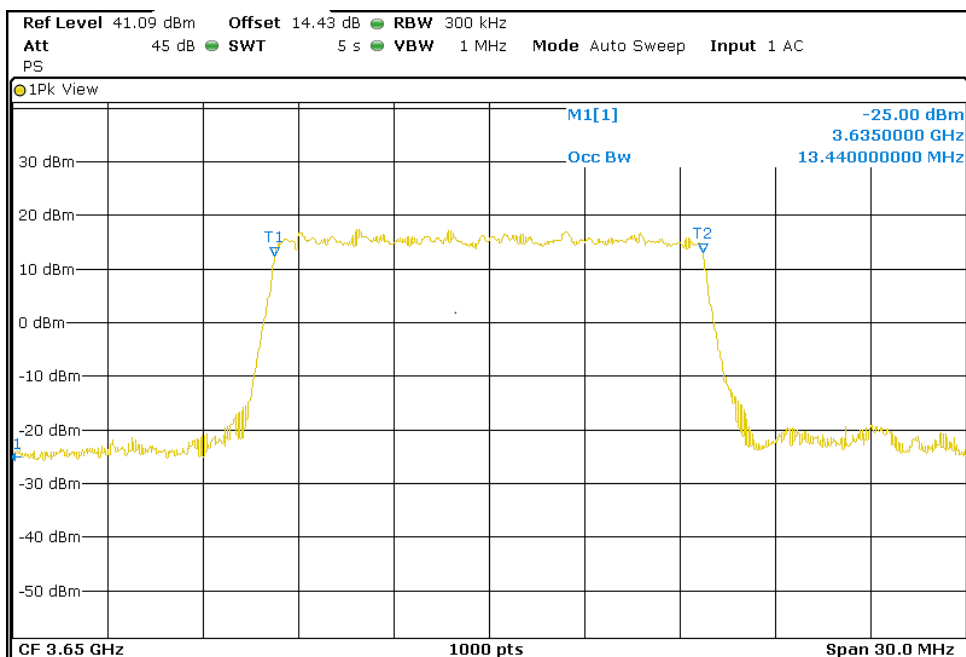


TEST RESULTS (Cont.):

Middle Channel (3650 MHz) QPSK

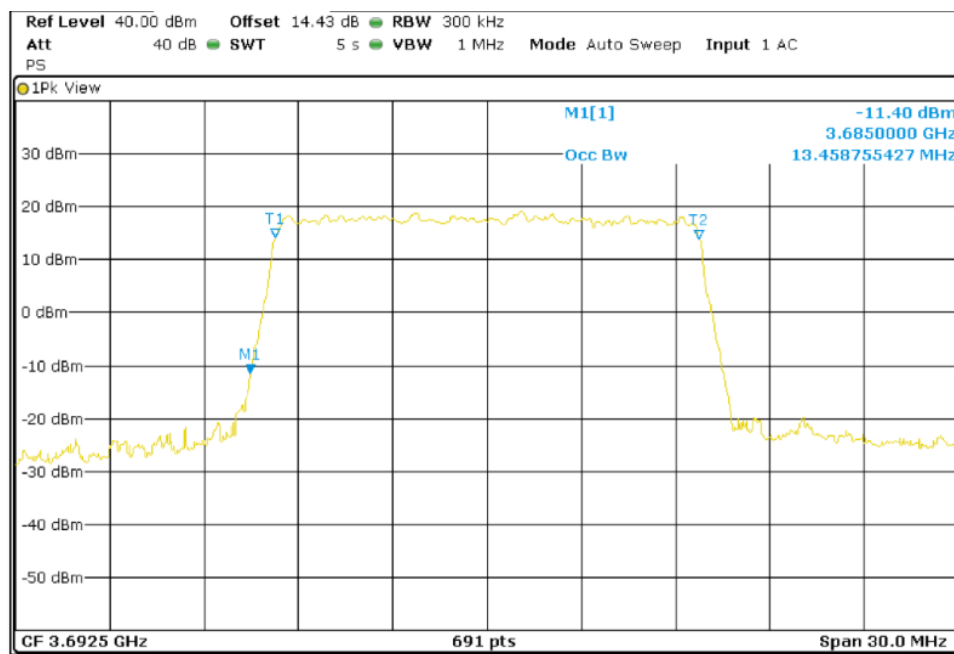


Middle Channel (3650 MHz) 16QAM

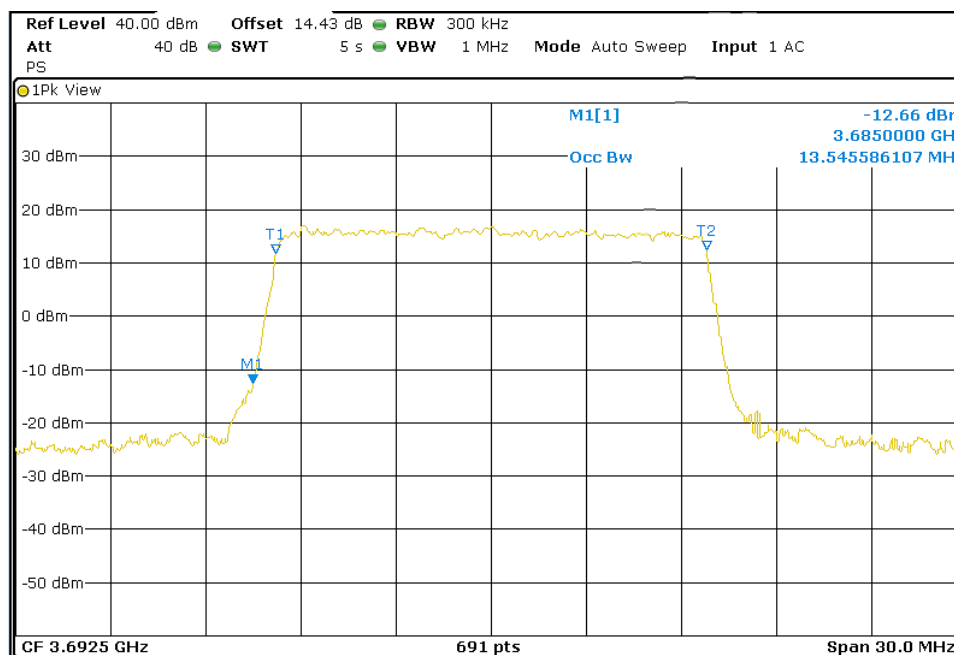


TEST RESULTS (Cont.):

Highest Channel (3692.5 MHz) QPSK



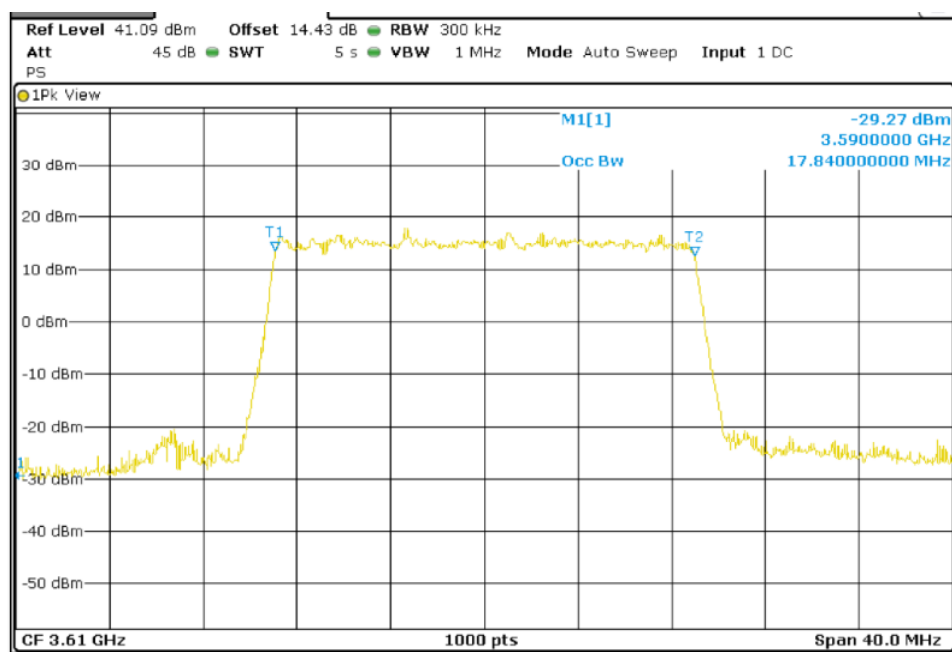
Highest Channel (3692.5 MHz) 16QAM



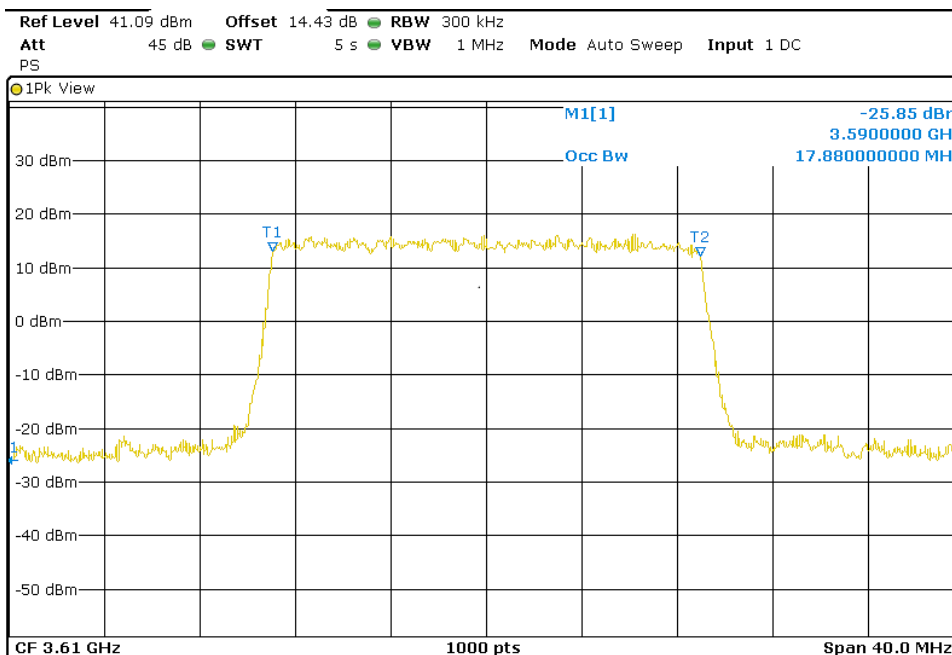
TEST RESULTS (Cont.):

20 MHz BW

Lowest Channel (3610 MHz) QPSK

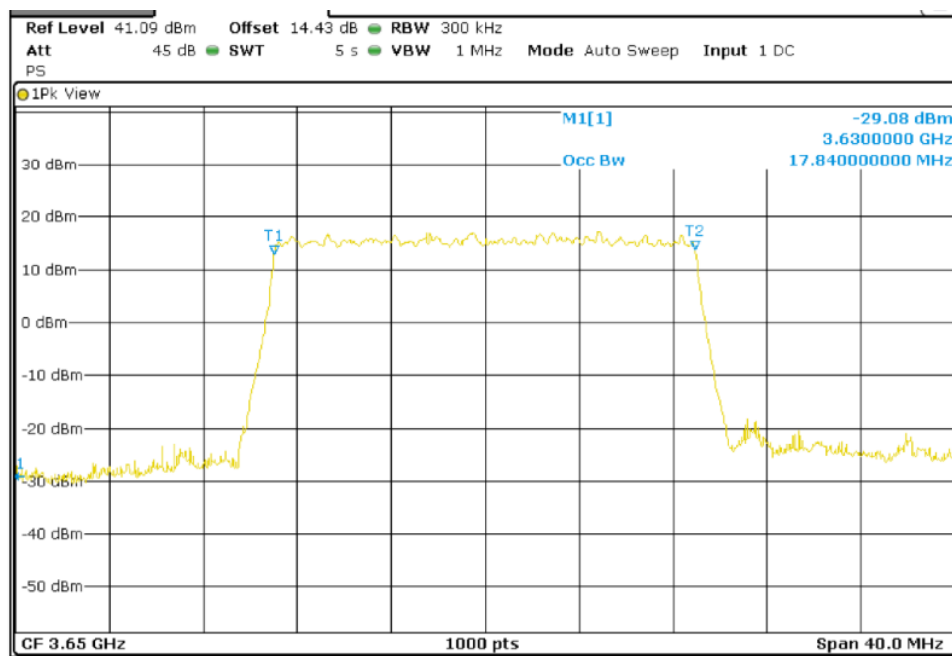


Lowest Channel (3610 MHz) 16QAM

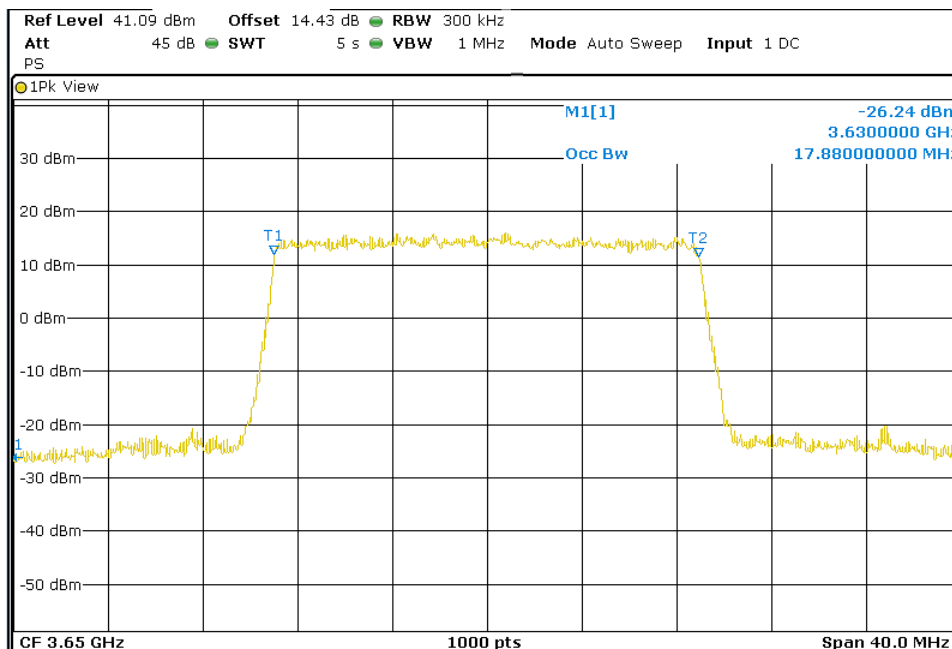


TEST RESULTS (Cont.):

Middle Channel (3650 MHz) QPSK

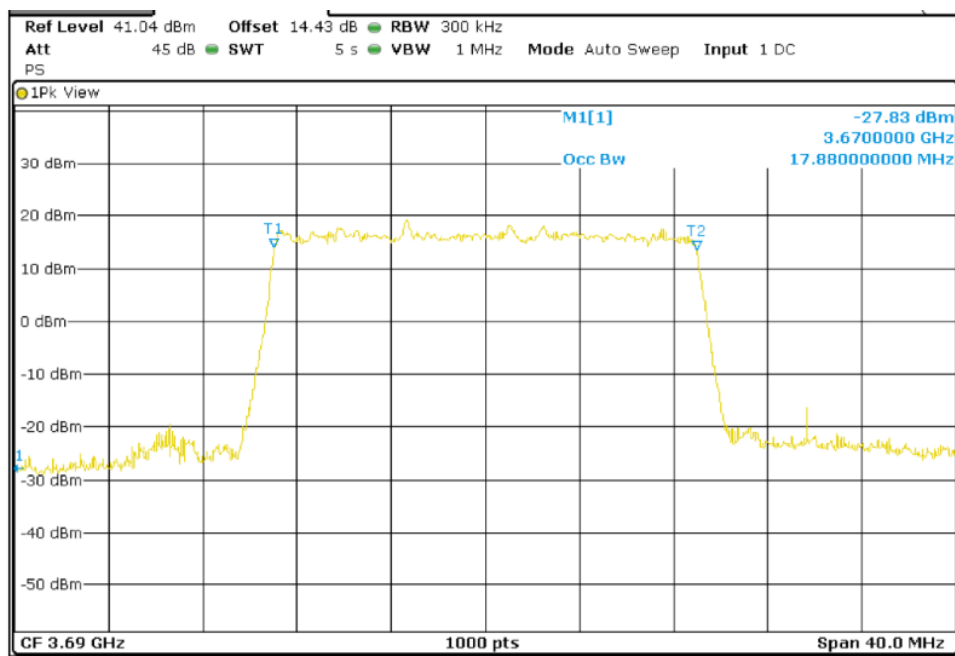


Middle Channel (3650 MHz) 16QAM

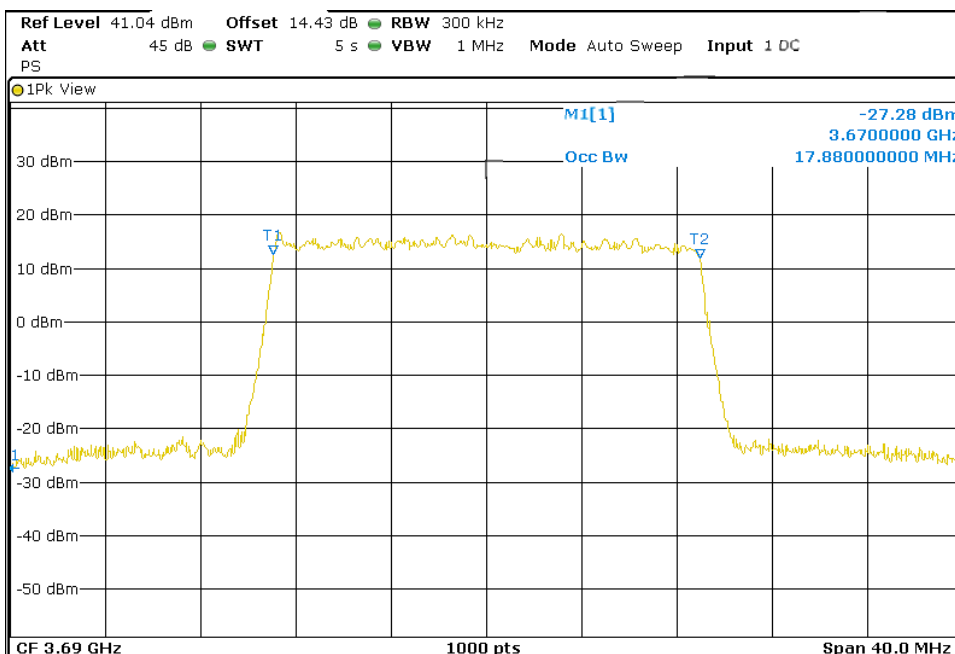


TEST RESULTS (Cont.):

High Channel (3690 MHz) QPSK



High Channel (3690 MHz) 16QAM

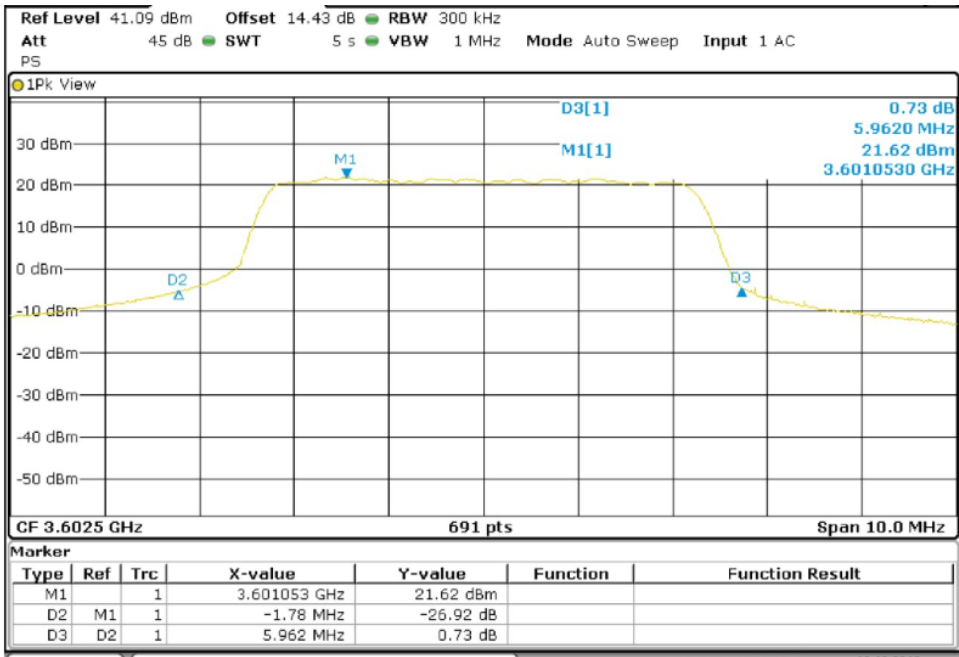


TEST RESULTS (Cont.):

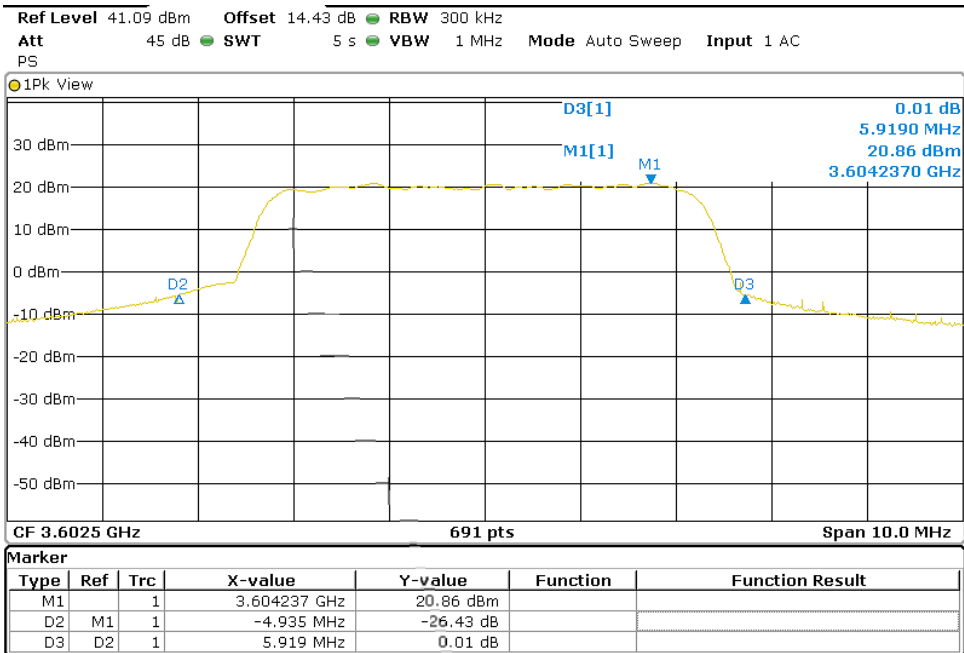
-26dB Bandwidth

5 MHz BW

Lowest Channel (3602.5 MHz) QPSK



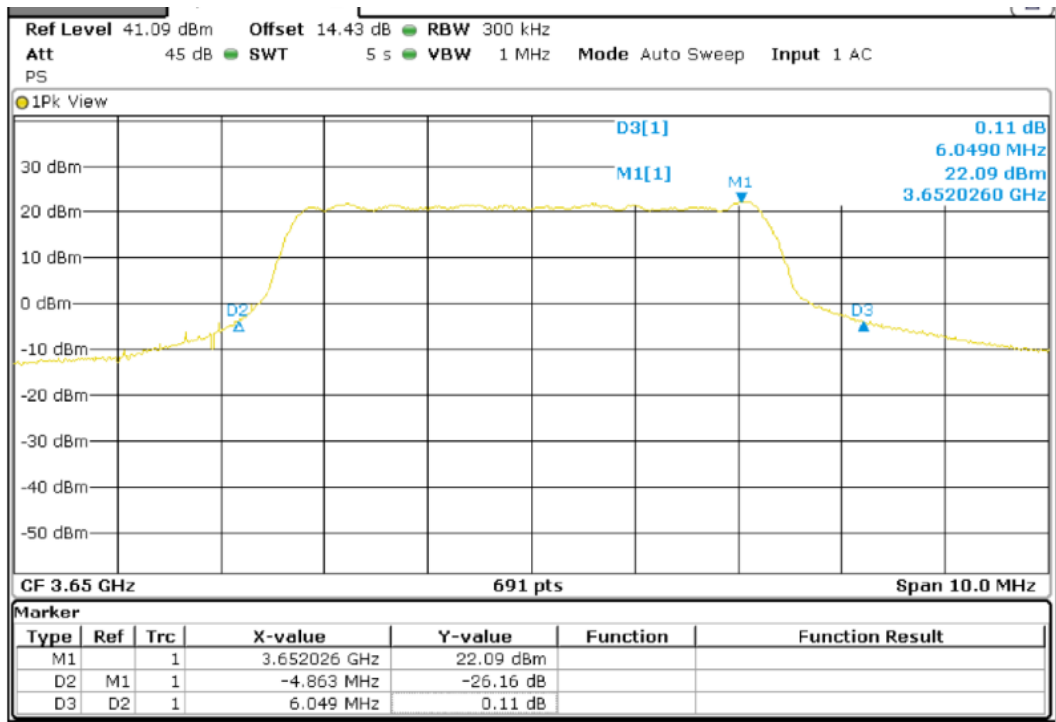
Lowest Channel (3602.5 MHz) 16QAM



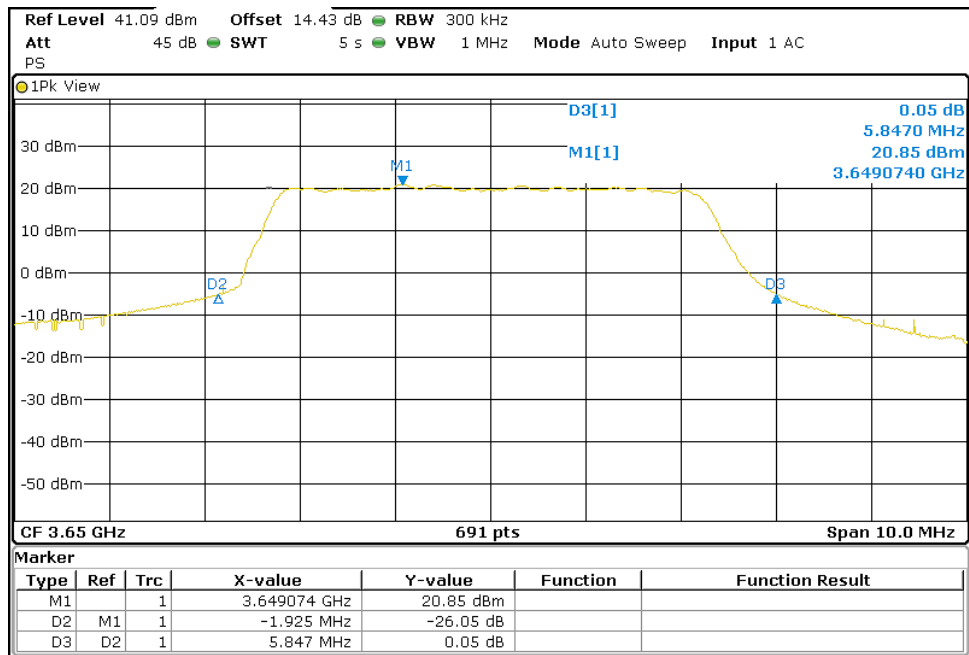
TEST RESULTS (Cont.):

-26dB Bandwidth

Middle Channel (3650 MHz) QPSK

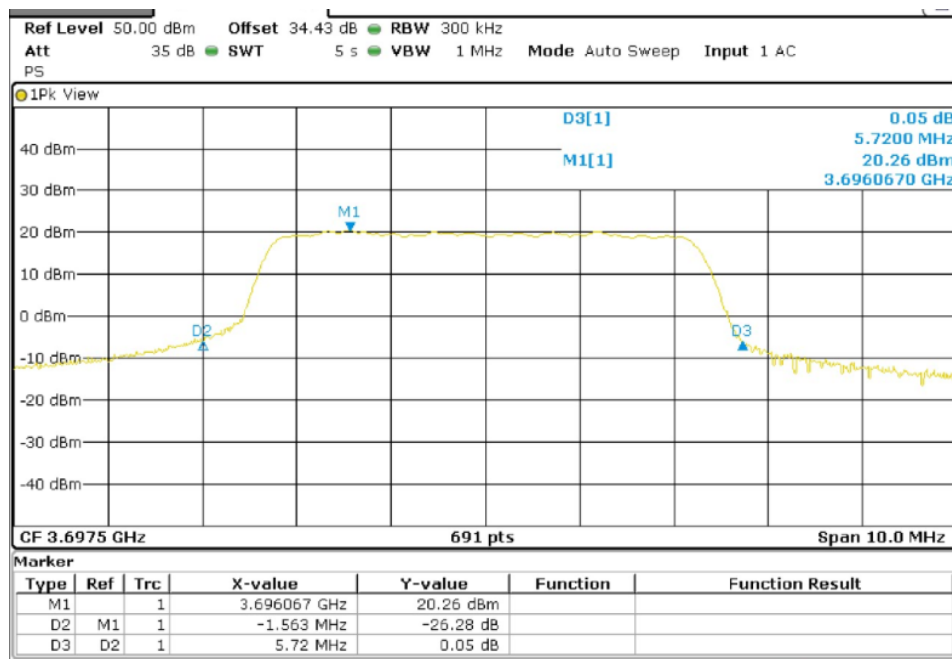


Middle Channel (3650 MHz) 16QAM

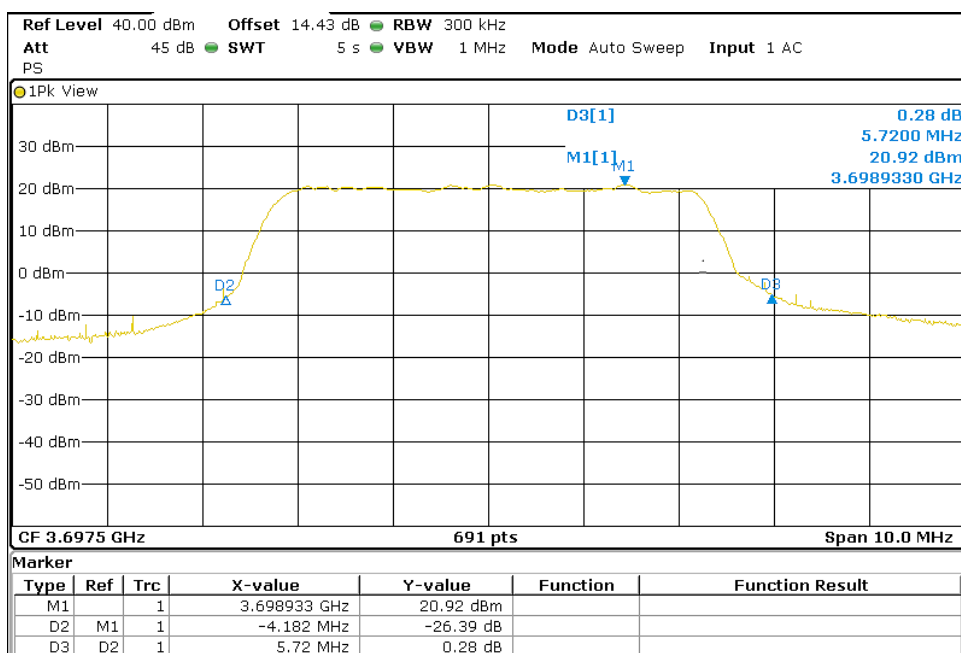


TEST RESULTS (Cont.):

Highest Channel (3697.5 MHz) QPSK



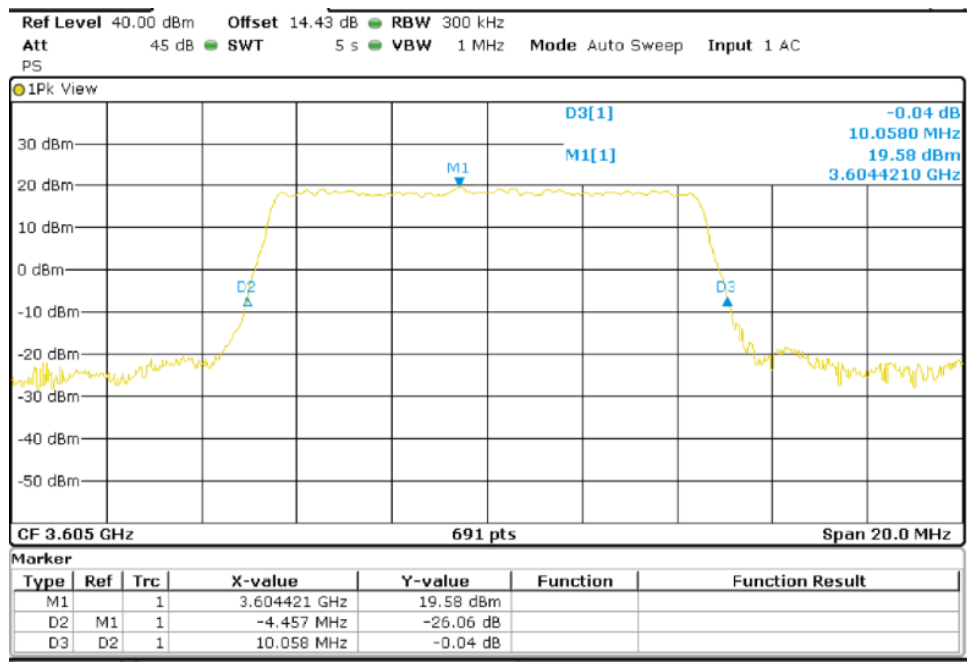
Highest Channel (3697.5 MHz) 16QAM



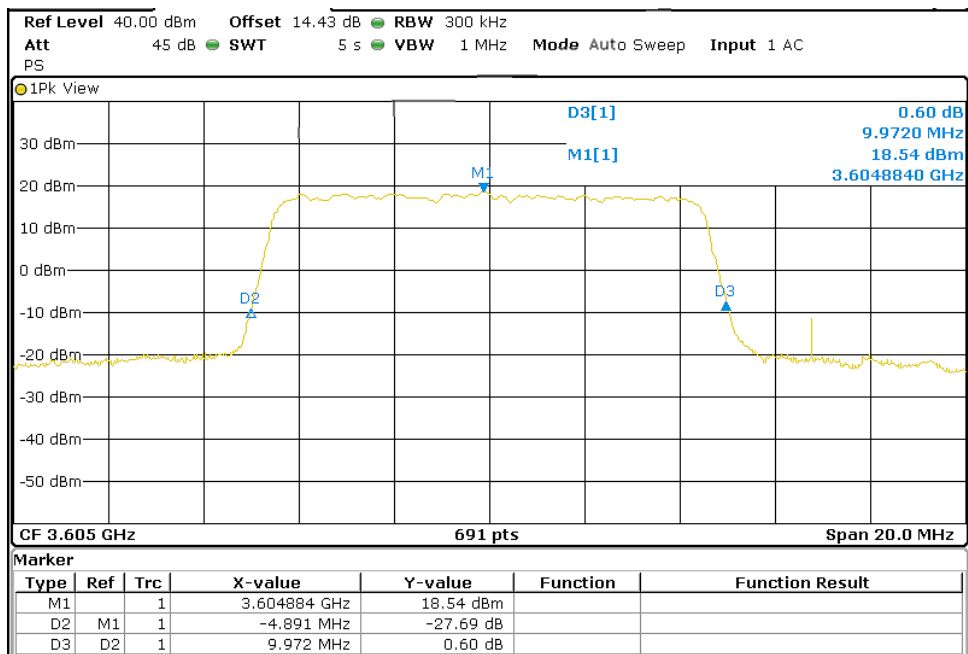
TEST RESULTS (Cont.):

10 MHz BW

Lowest Channel (3605 MHz) QPSK

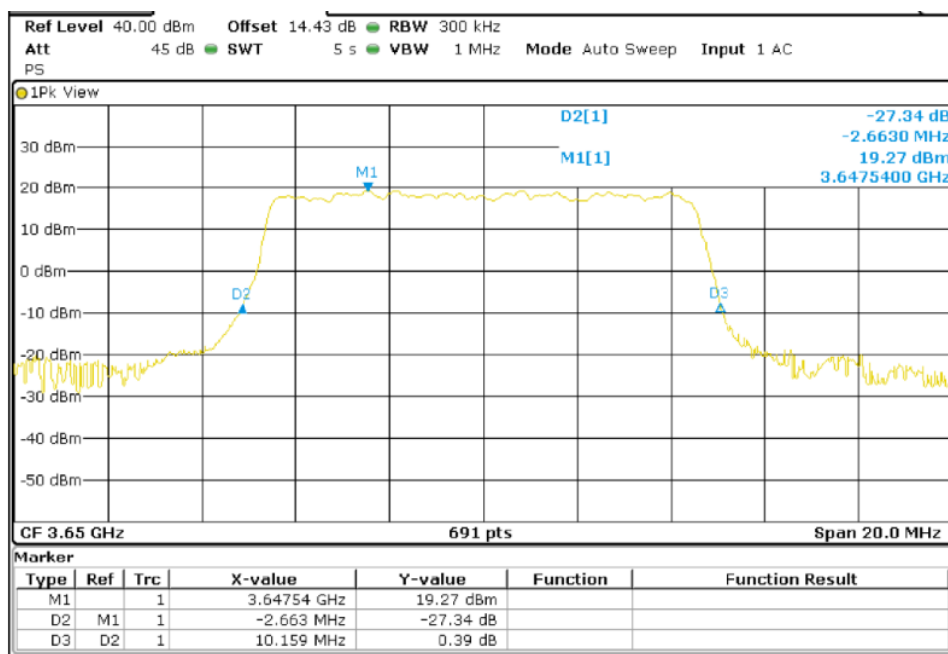


Lowest Channel (3605 MHz) 16QAM

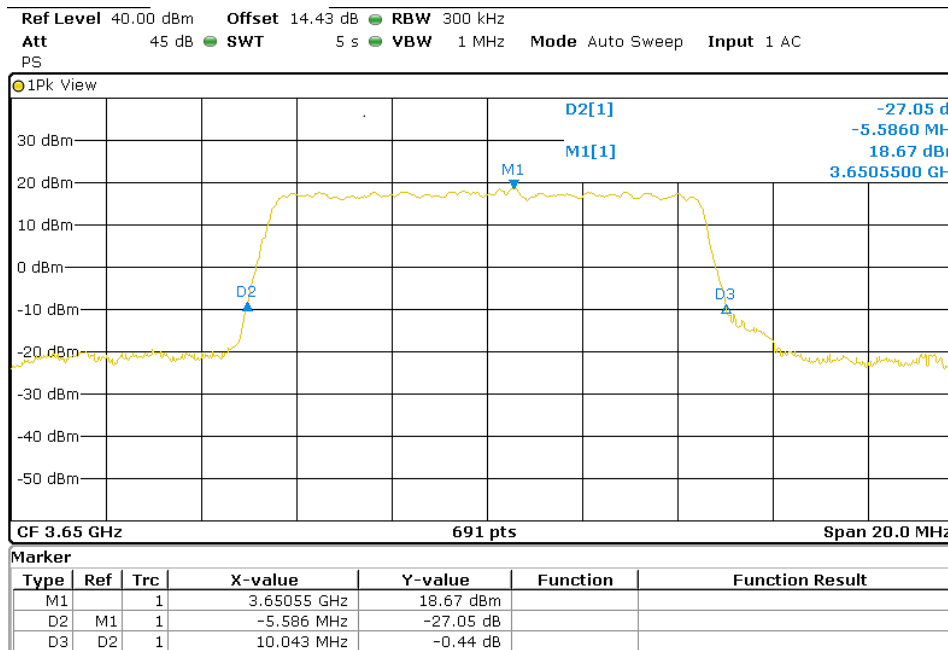


TEST RESULTS (Cont.):

Middle Channel (3650 MHz) QPSK

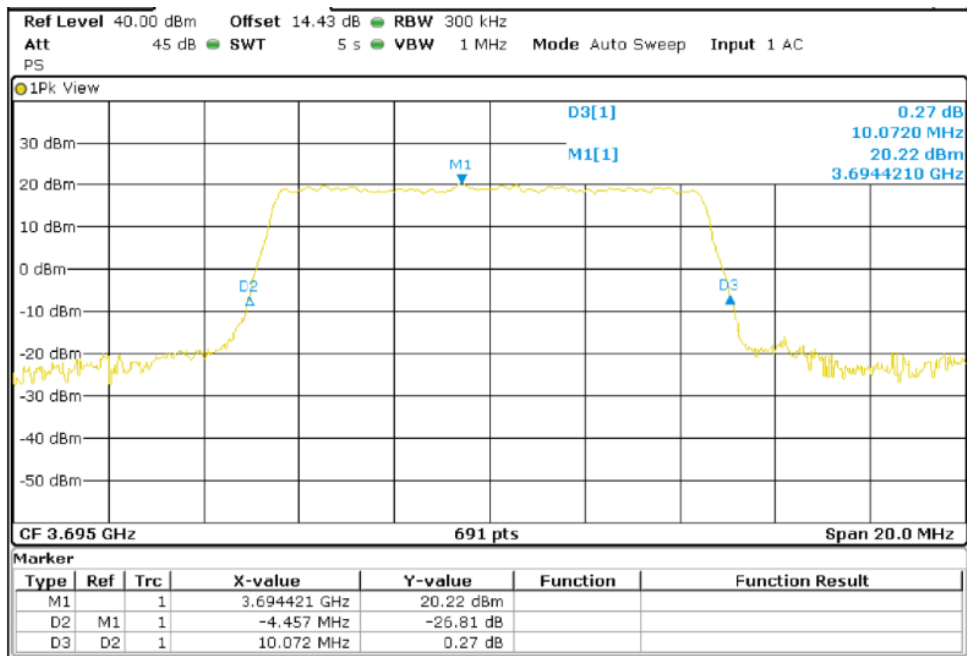


Middle Channel (3650 MHz) 16QAM

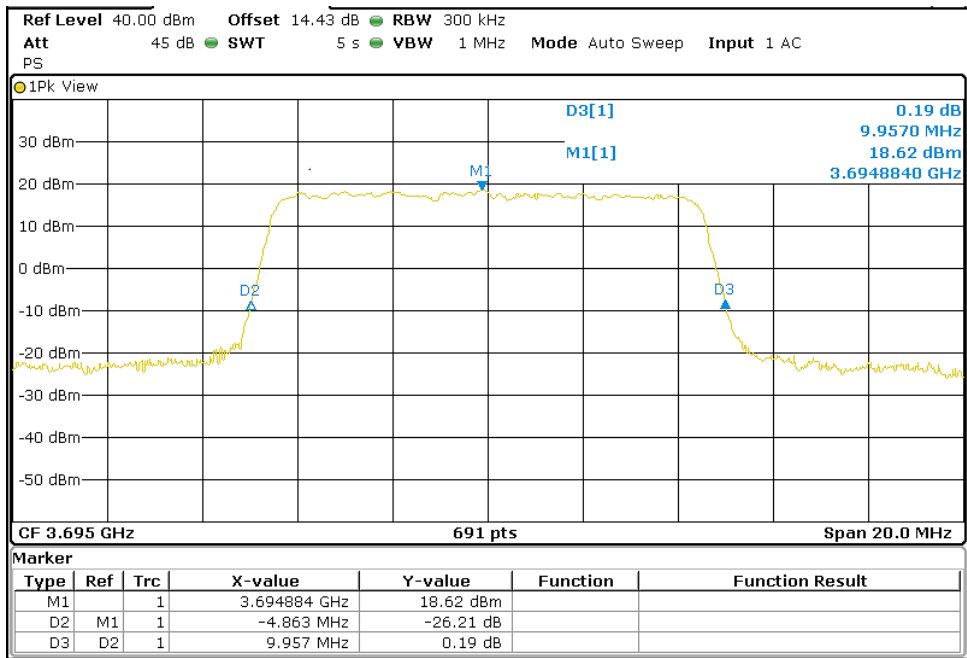


TEST RESULTS (Cont.):

High Channel (3695 MHz) QPSK



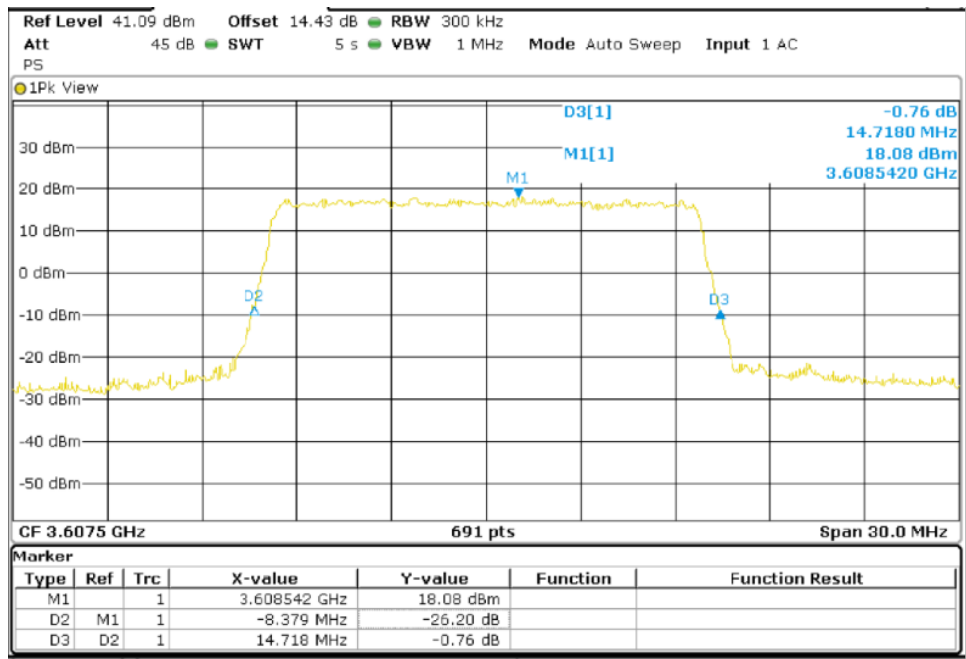
High Channel (3695 MHz) 16QAM



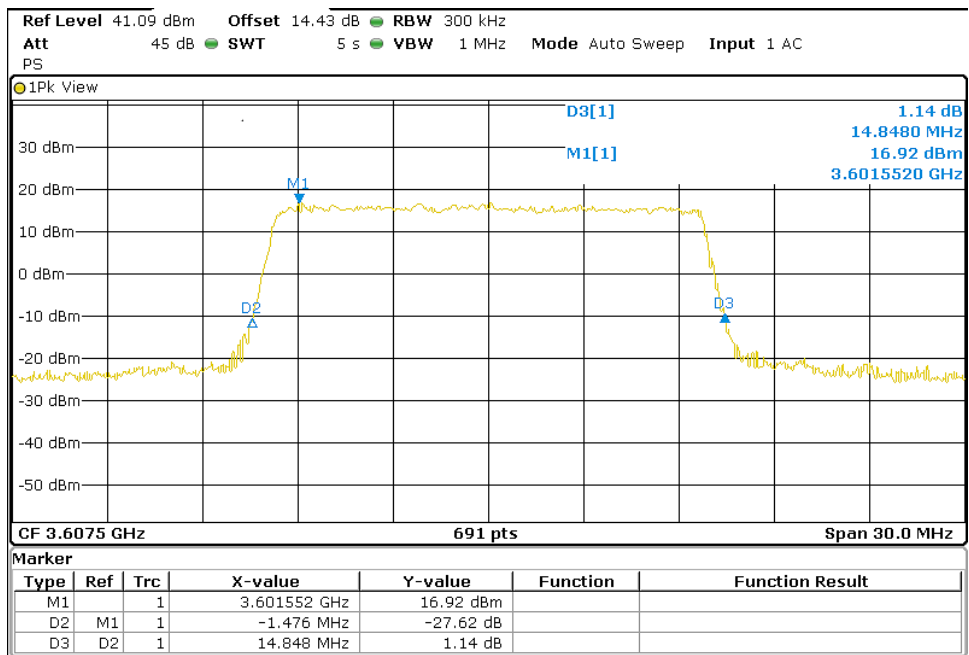
TEST RESULTS (Cont.):

15 MHz BW

Lowest Channel (3607.5 MHz) QPSK

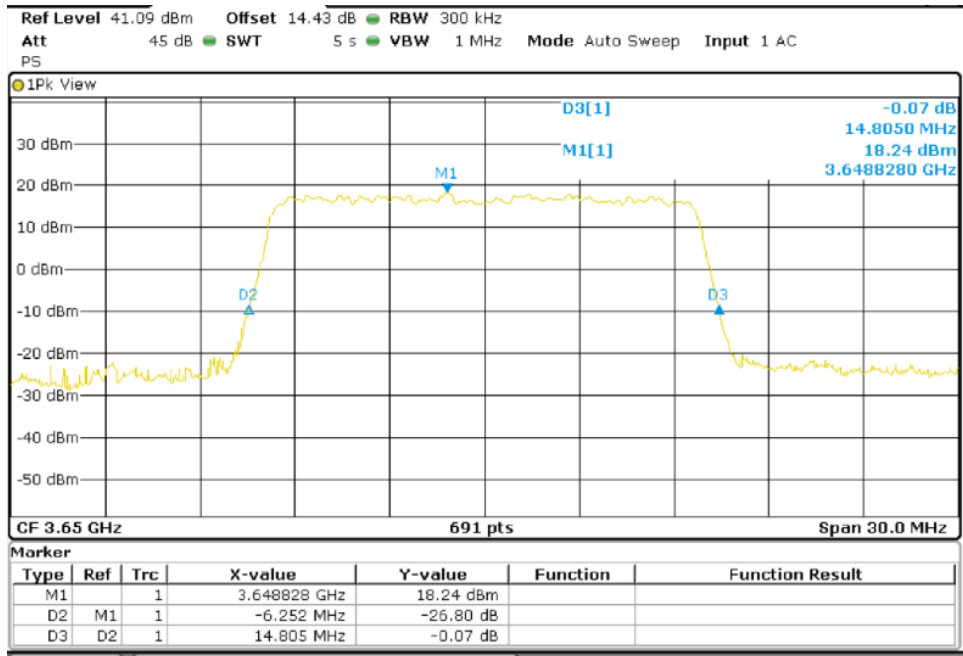


Lowest Channel (3607.5 MHz) 16QAM

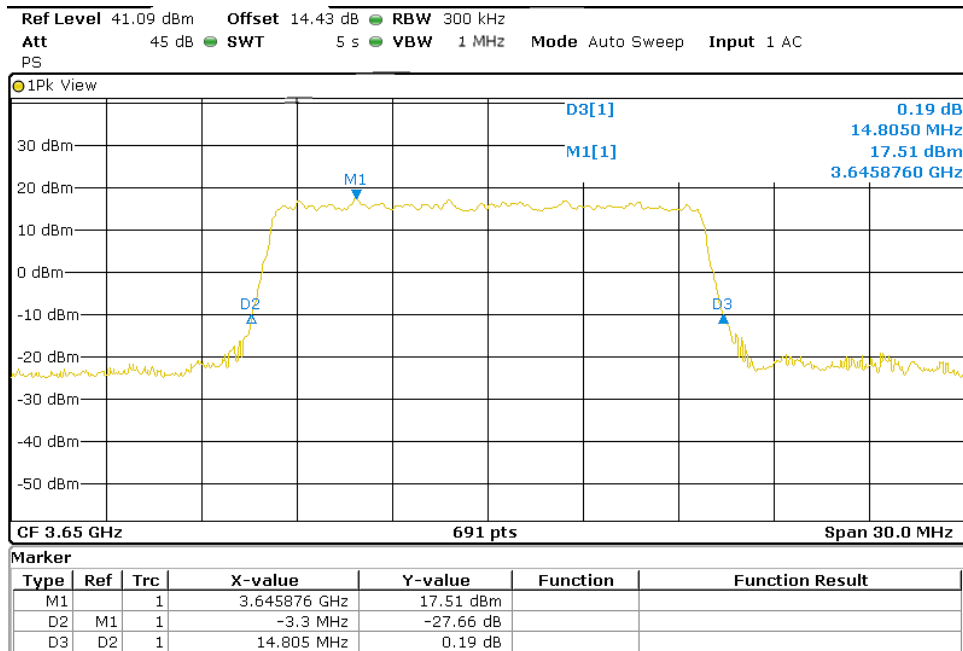


TEST RESULTS (Cont.):

Middle Channel (3650 MHz) QPSK

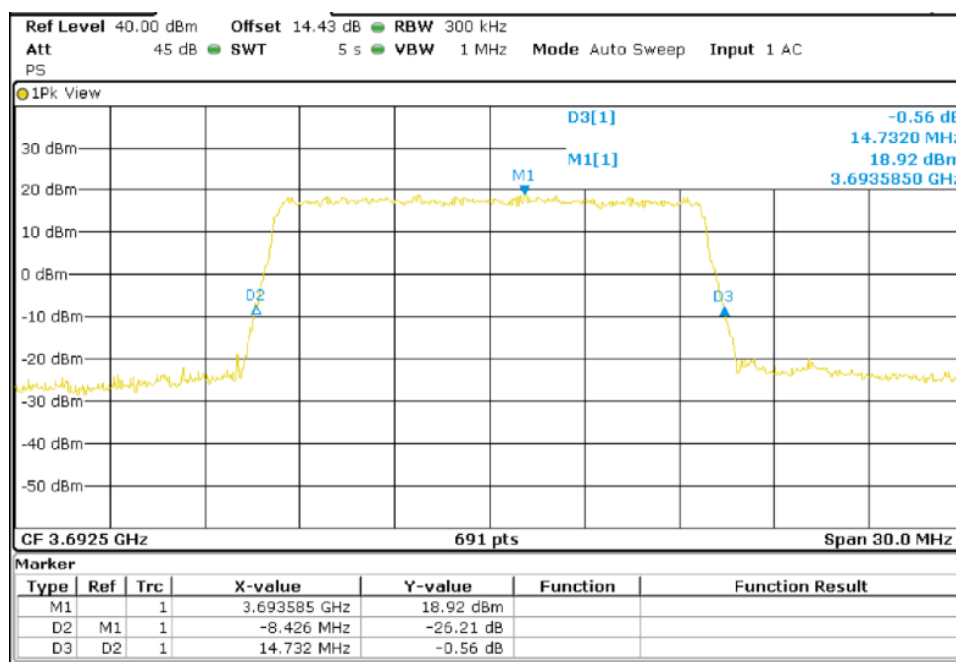


Middle Channel (3650 MHz) 16QAM

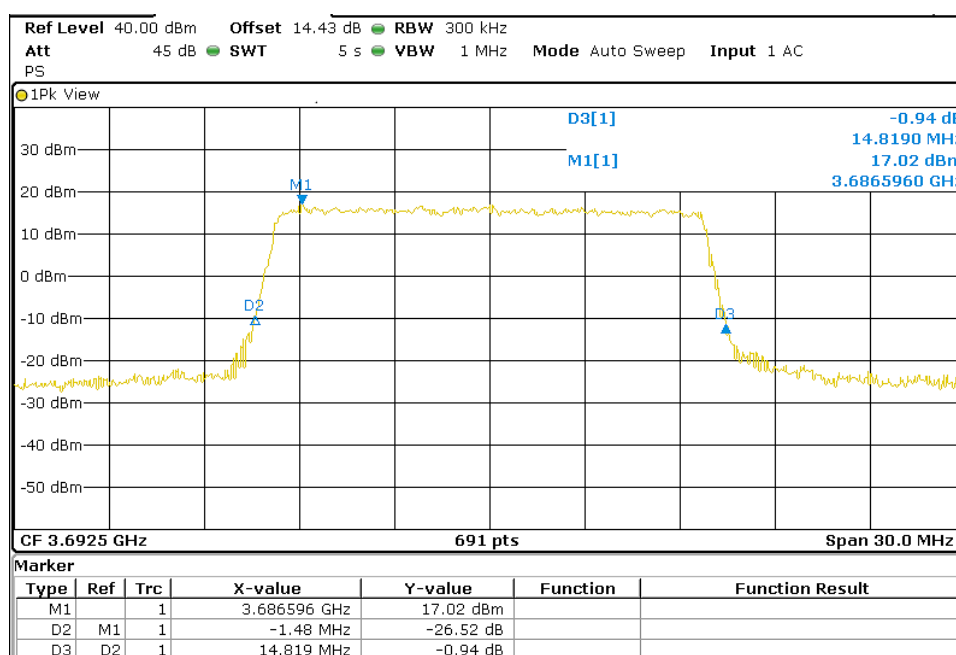


TEST RESULTS (Cont.):

Highest Channel (3692.5 MHz) QPSK



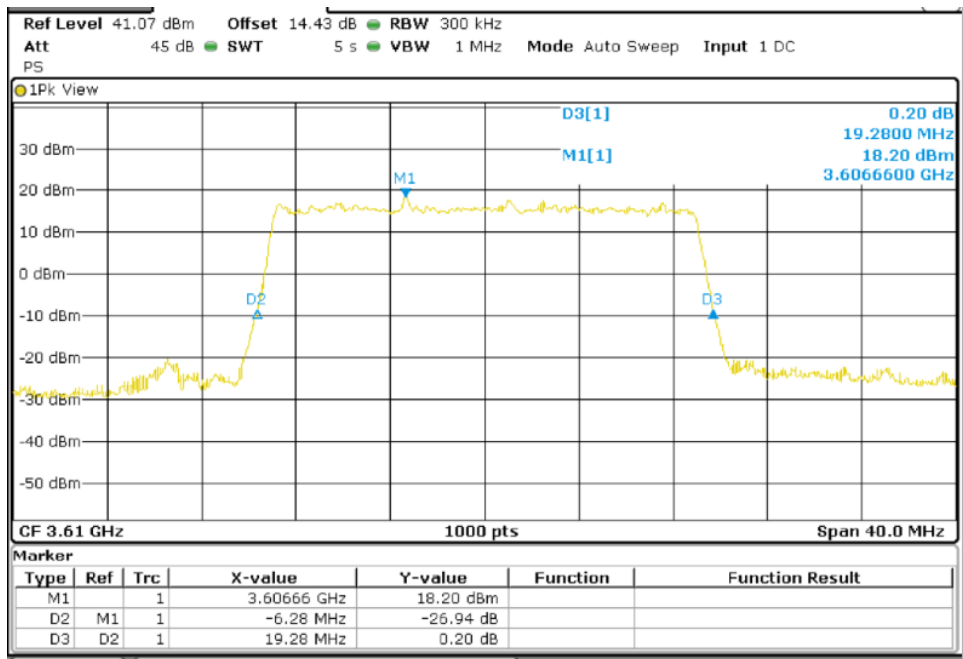
Highest Channel (3692.5 MHz) 16QAM



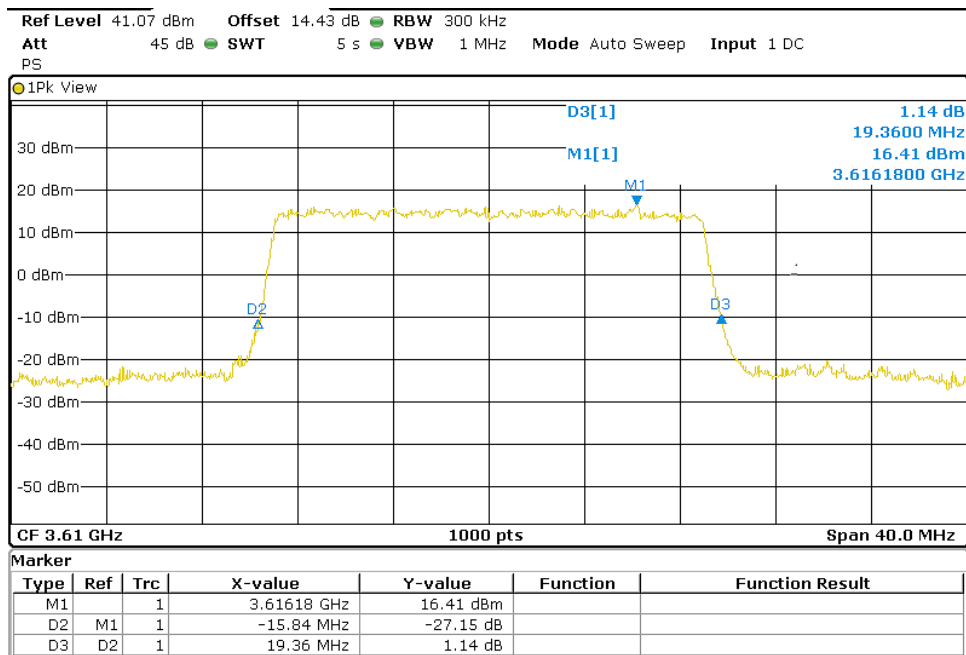
TEST RESULTS (Cont.):

20 MHz BW

Lowest Channel (3610 MHz) QPSK

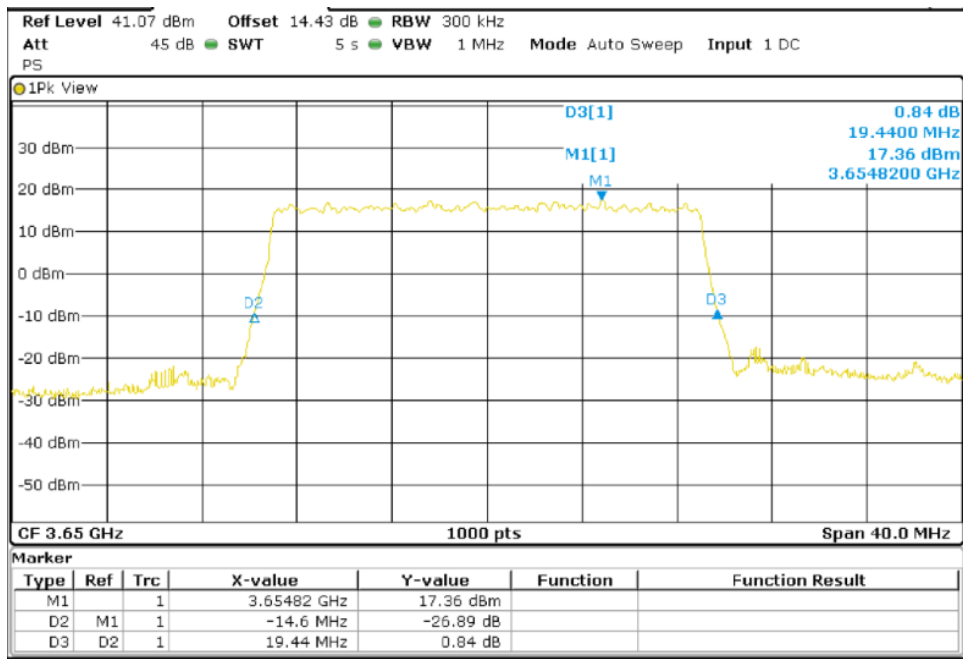


Lowest Channel (3610 MHz) 16QAM

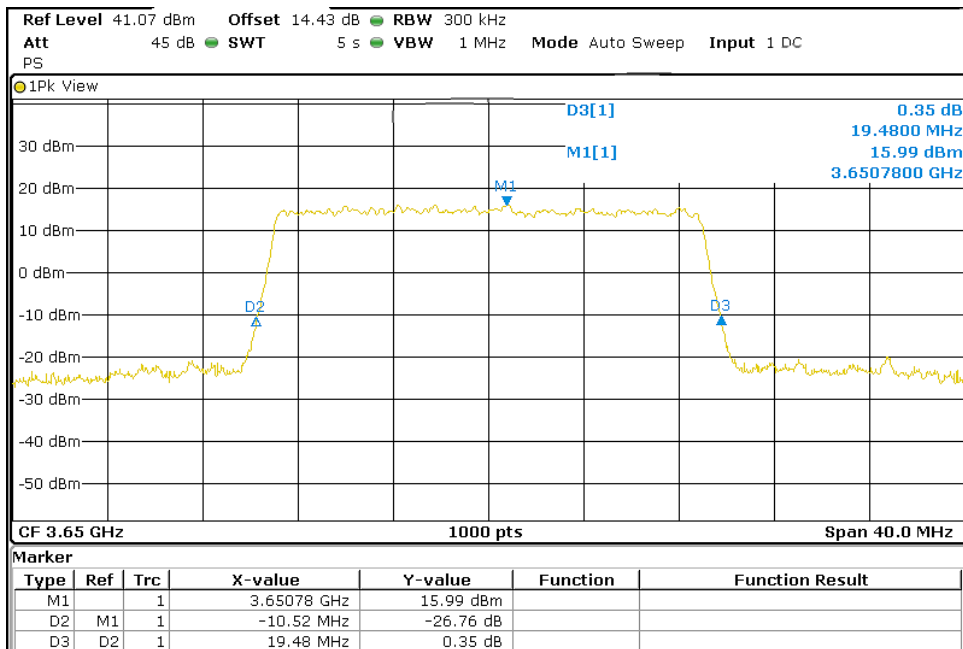


TEST RESULTS (Cont.):

Middle Channel (3650 MHz) QPSK

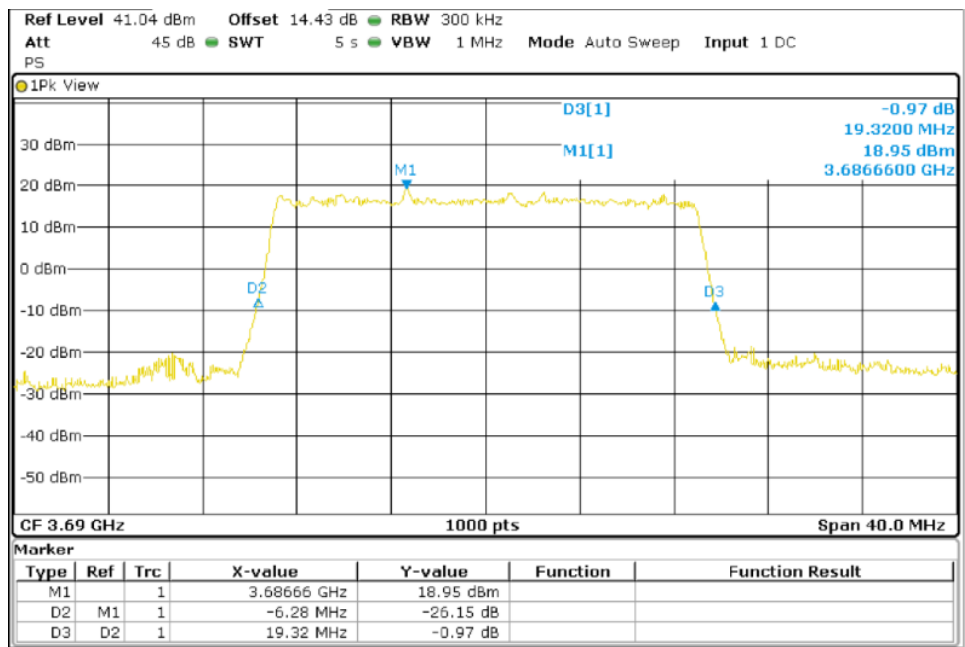


Middle Channel (3650 MHz) 16QAM

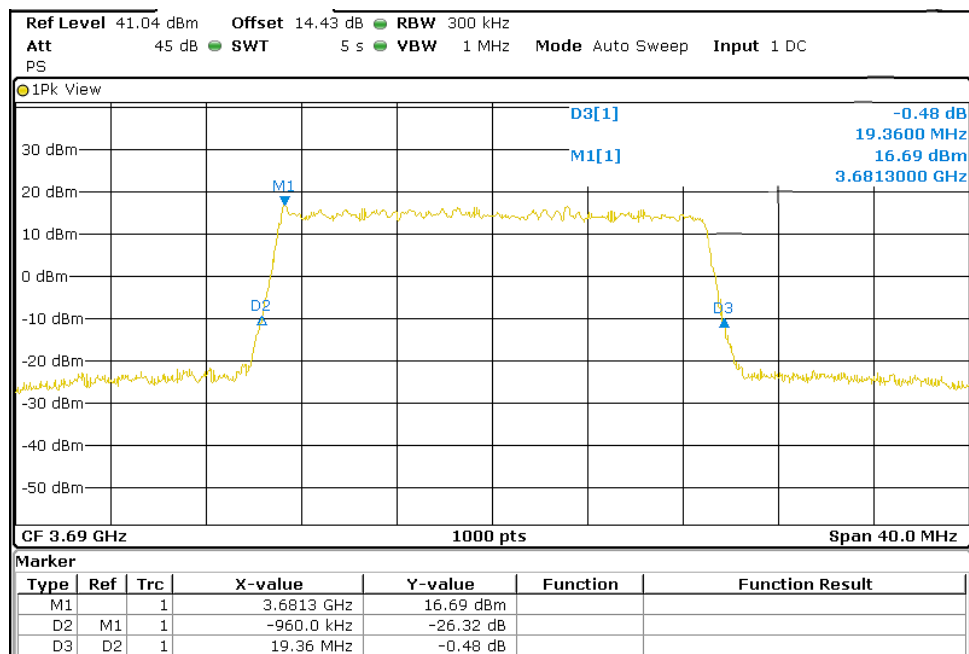


TEST RESULTS (Cont.):

High Channel (3690 MHz) QPSK



High Channel (3690 MHz) 16QAM



TEST A.4: MAXIMUM POWER SPECTRAL DENSITY (PSD)

LIMITS:	Product standard:	Part 96.41 SUBCLAUSE (B)
	Test standard:	Part 15 Subpart C §15.247(b)(3) and RSS-247 5.4(d)

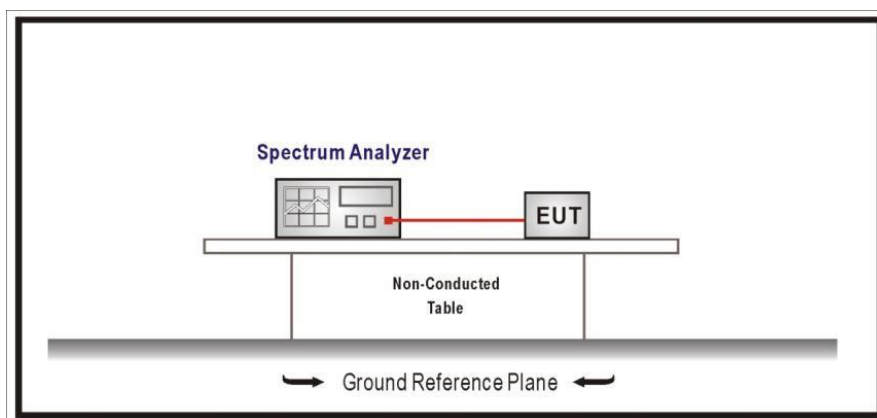
LIMITS

The maximum effective isotropic radiated power (EIRP) and maximum Power Spectral Density (PSD) of any CBSD and End User Device must comply with the limits shown in the following table.

Device	Maximum EIRP (dBm/10 MHz)	Maximum PSD (dBm/MHz)
End User Device	23	n/a
Category A CBSD	30	20
Category B CBSD	47	37

TEST SETUP

The rules require “maximum power spectral density” measurements, where the intent is to measure the maximum value of the time average of the power spectral density measured during a period of continuous transmission. To perform this measurement, the DUT must be configured to transmit continuously at full power. The procedure in Section 5.2 of ANSI C63.26-2015 is acceptable. The RMS detector was used for the measurement at each frequency with following the procedure stated in the Section 5.2.4.5 of ANSI C63.26-2015.



TESTED SAMPLES:	N/A
TESTED CONDITIONS MODES:	N/A
TEST RESULTS:	N/A

TEST A.5: PEAK-TO-AVERAGE POWER RATIO (PAPR)

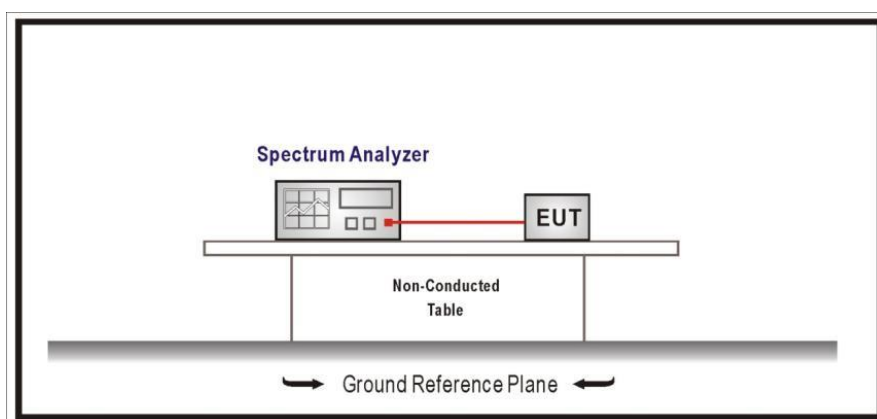
LIMITS:	Product standard:	Part 96.41 Subclause (g)
	Test standard:	ANSI C63.26-2015

LIMITS

In addition to the power limits in Section 96.41, CBSDs need to meet a PAPR limit. For this measurement, the procedure in Section 5.2.6 of ANSI C63.26-2015 is acceptable. CCDF (Complementary Cumulative Distribution Function) measurement was utilized in the spectrum analyzer and the maximum PAPR level with 0.1 % probability values were recorded.

The peak-to-average power ratio (PAPR) of any CBSD transmitter output power must not exceed 13 db.

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

Results:

5 MHz BW

	Lowest frequency 3552.5 MHz	Middle frequency 3625 MHz	Highest frequency 3697.5 MHz
Peak (dBm)	27.04	26.28	27.06
Mean (dBm)	16.64	16.08	16.50
PAPR at 0.1% probability (dB)	9.88	9.42	9.86
Measurement uncertainty (dB)	<±1.11		

TEST RESULTS (Cont.):

10 MHz BW

	Lowest frequency 3555 MHz	Middle frequency 3625 MHz	Highest frequency 3695 MHz
Peak (dBm)	27.66	28.22	28.33
Mean (dBm)	16.98	17.06	17.27
PAPR at 0.1% probability (dB)	10.23	10.52	10.38
Measurement uncertainty (dB)	<±1.11		

15 MHz BW

	Lowest frequency 3557.5 MHz	Middle frequency 3625 MHz	Highest frequency 3692.5 MHz
Peak (dBm)	27.38	27.18	27.12
Mean (dBm)	16.23	16.68	16.63
PAPR at 0.1% probability (dB)	10.64	10.09	10.06
Measurement uncertainty (dB)	<±1.11		

20 MHz BW

	Lowest frequency 3560 MHz	Middle frequency 3625 MHz	Highest frequency 3690 MHz
Peak (dBm)	26.13	25.97	26.08
Mean (dBm)	15.53	14.95	15.58
PAPR at 0.1% probability (dB)	10.09	10.61	9.97
Measurement uncertainty (dB)	<±1.11		

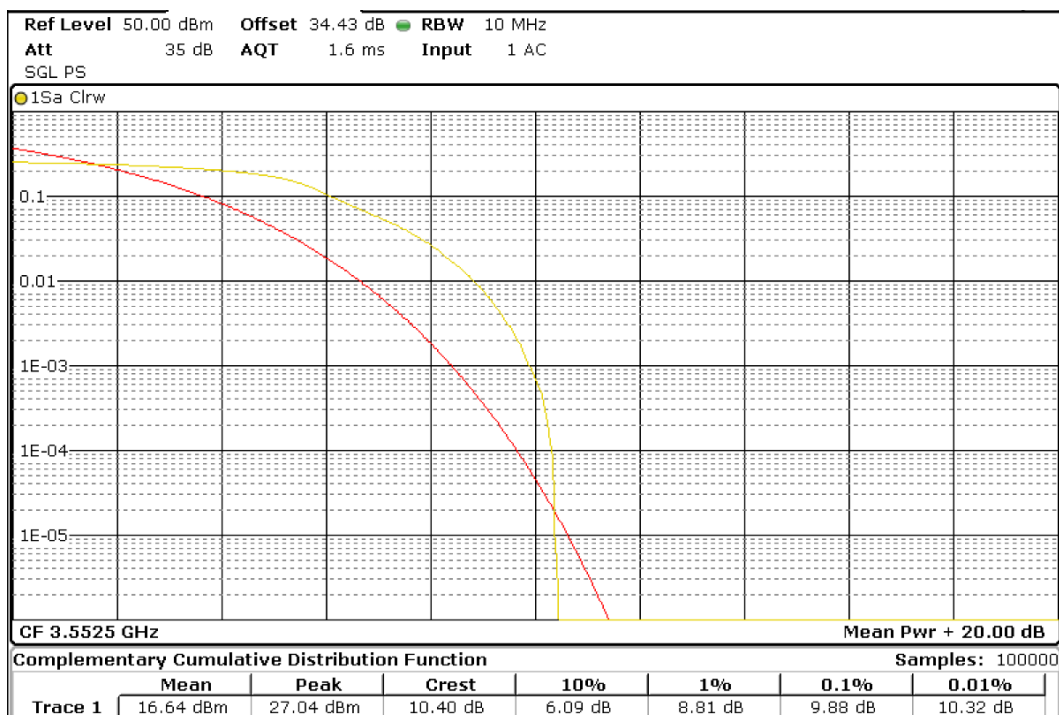
Verdict: PASS

(See next plots)

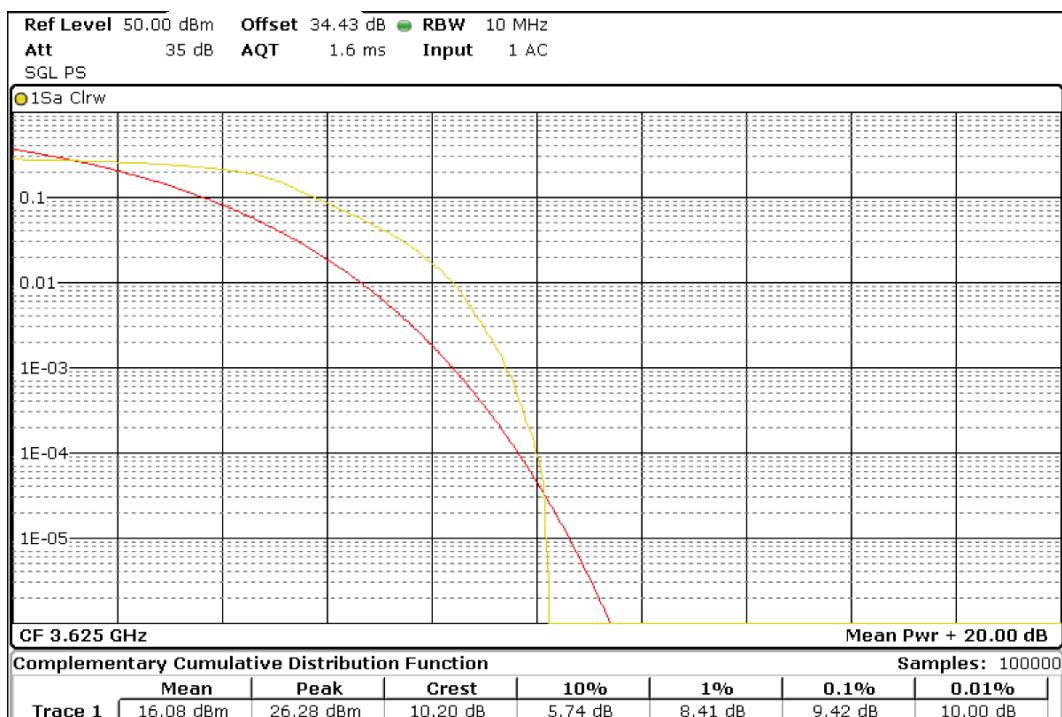
TEST RESULTS (Cont.):

5 MHz BW

Lowest Channel (3552.5 MHz)

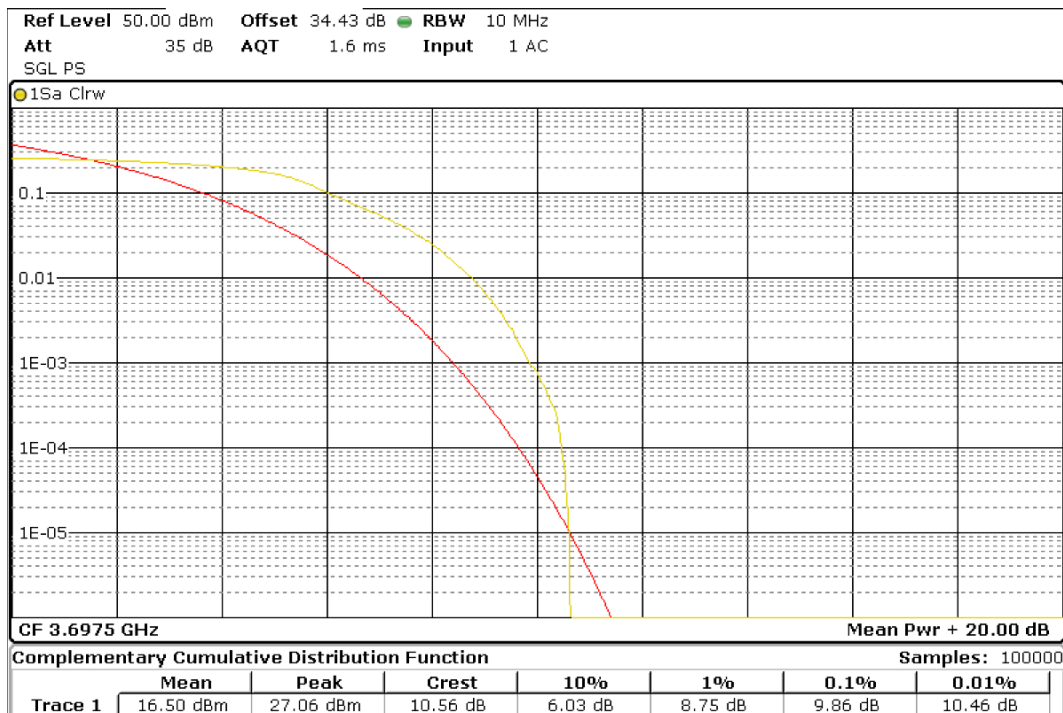


Middle Channel (3625 MHz)



TEST RESULTS (Cont.):

Highest Channel (3697.5 MHz)



10 MHz BW

Lowest Channel (3555 MHz)

