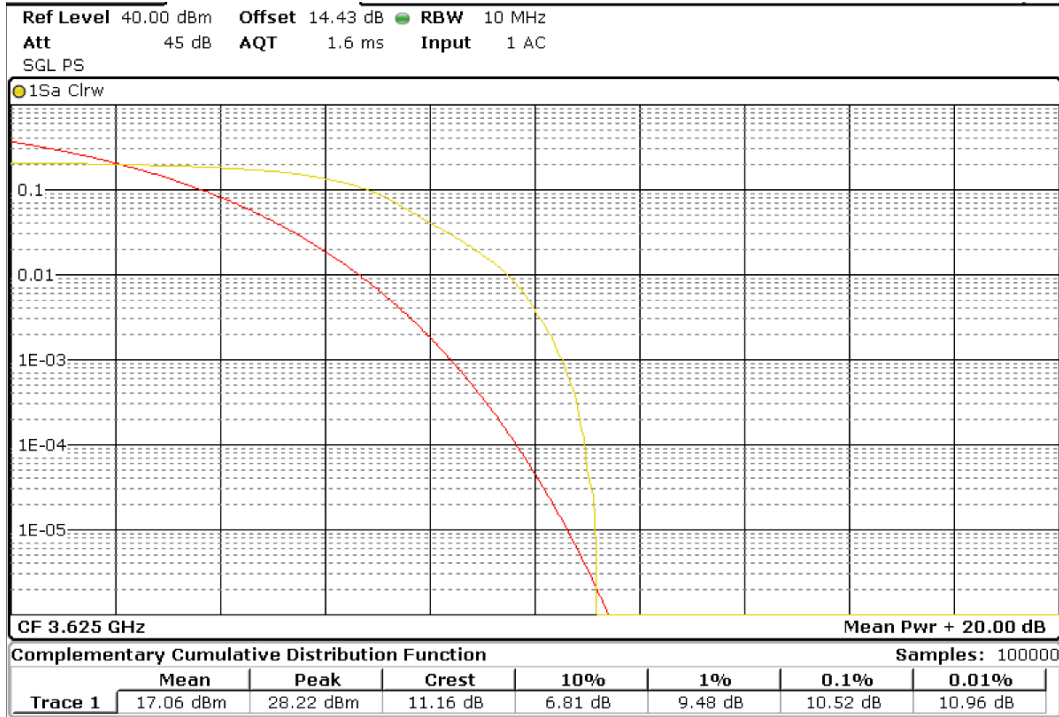
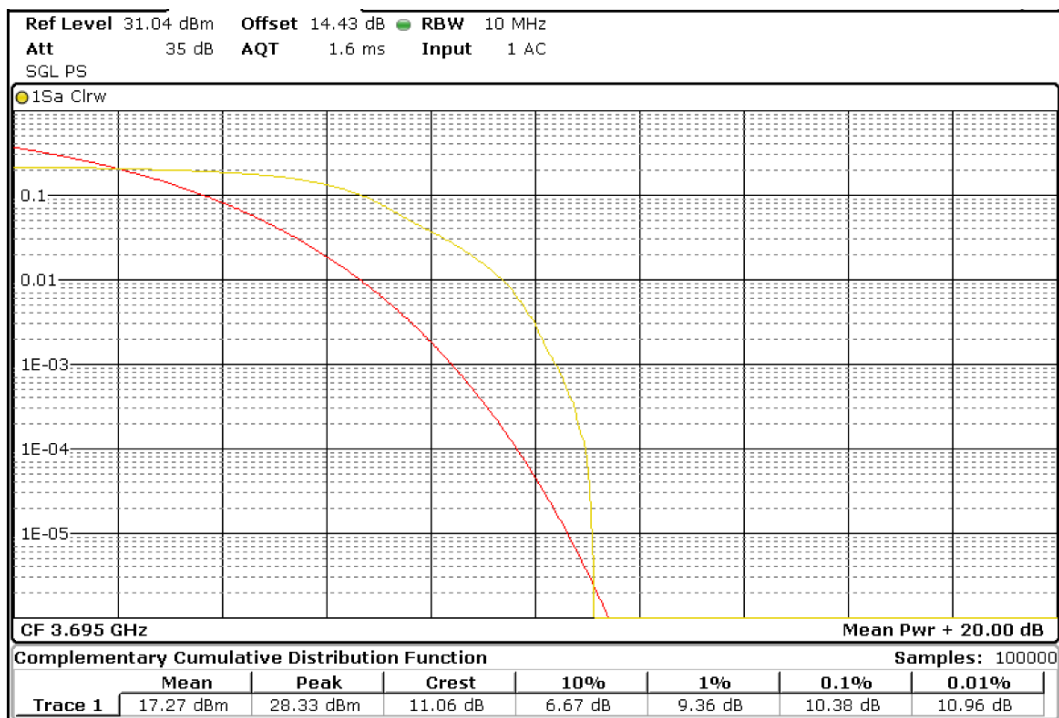


TEST RESULTS (Cont.):

Middle Channel (3625 MHz)



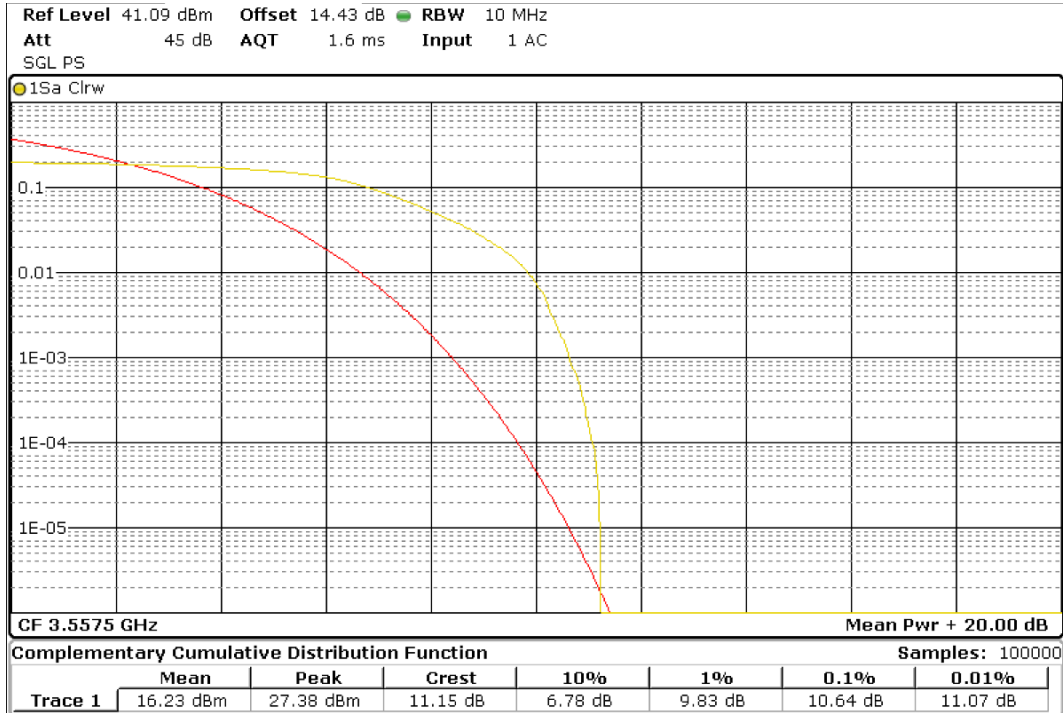
Highest Channel (3695 MHz)



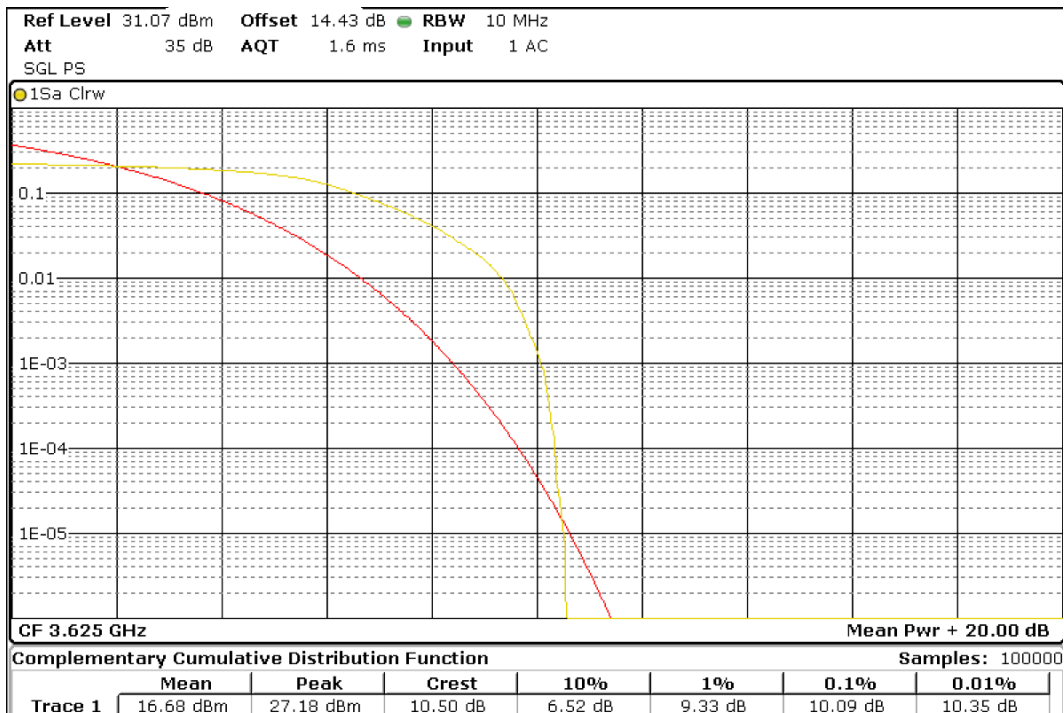
TEST RESULTS (Cont.):

15 MHz BW

Lowest Channel (3557.5 MHz)

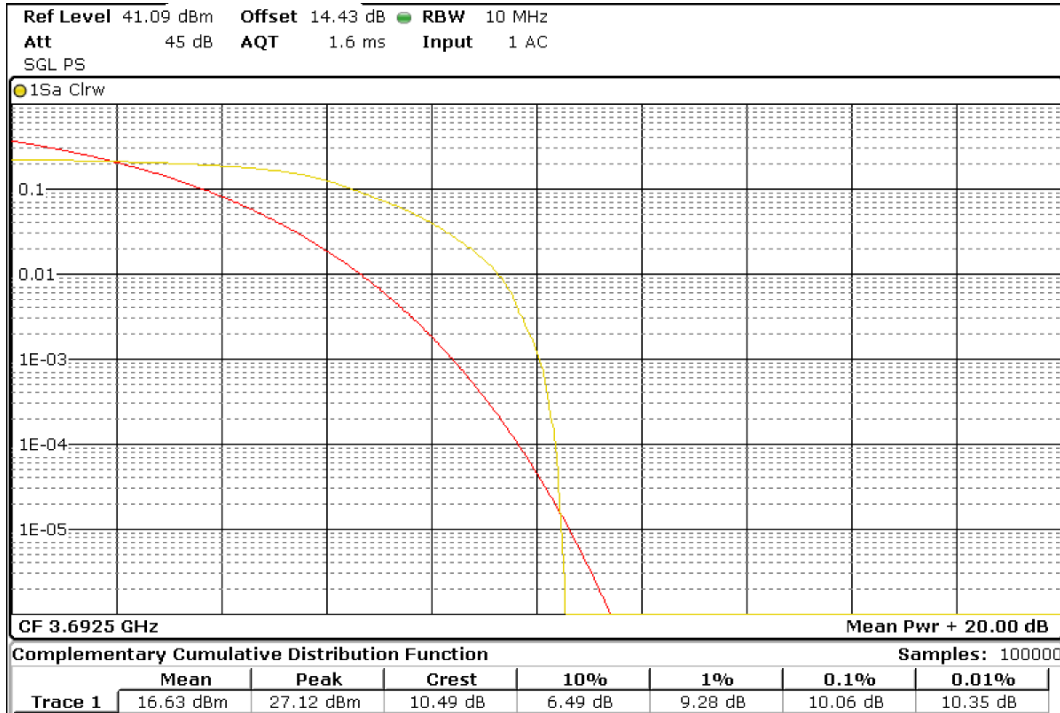


Middle Channel (3625 MHz)



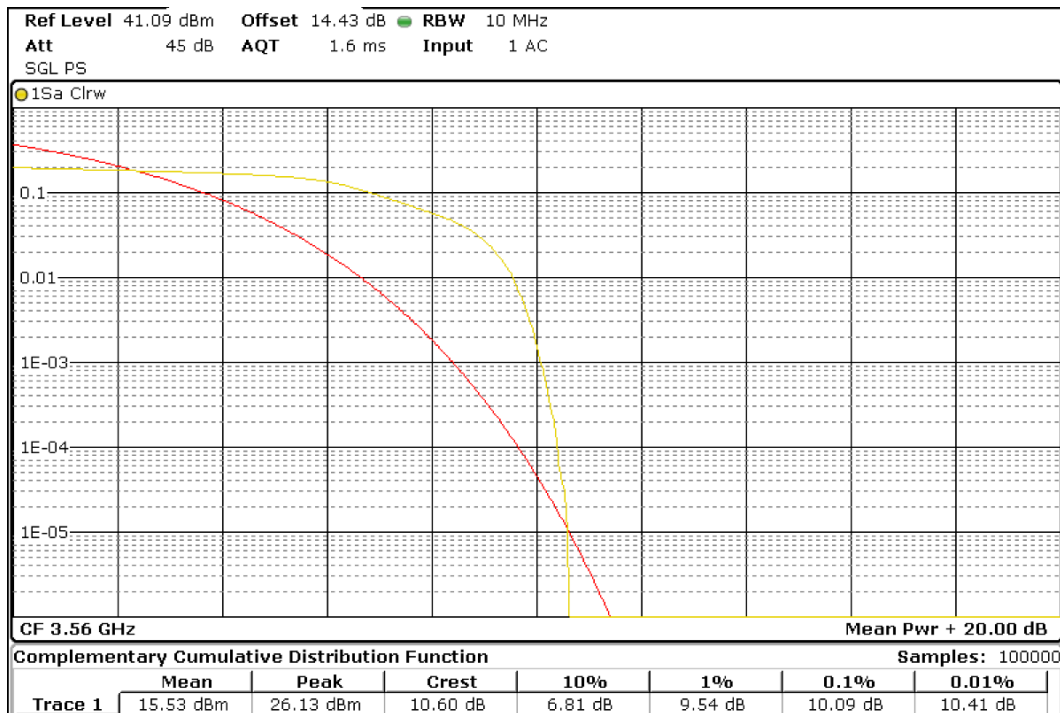
TEST RESULTS (Cont.):

Highest Channel (3692.5 MHz)



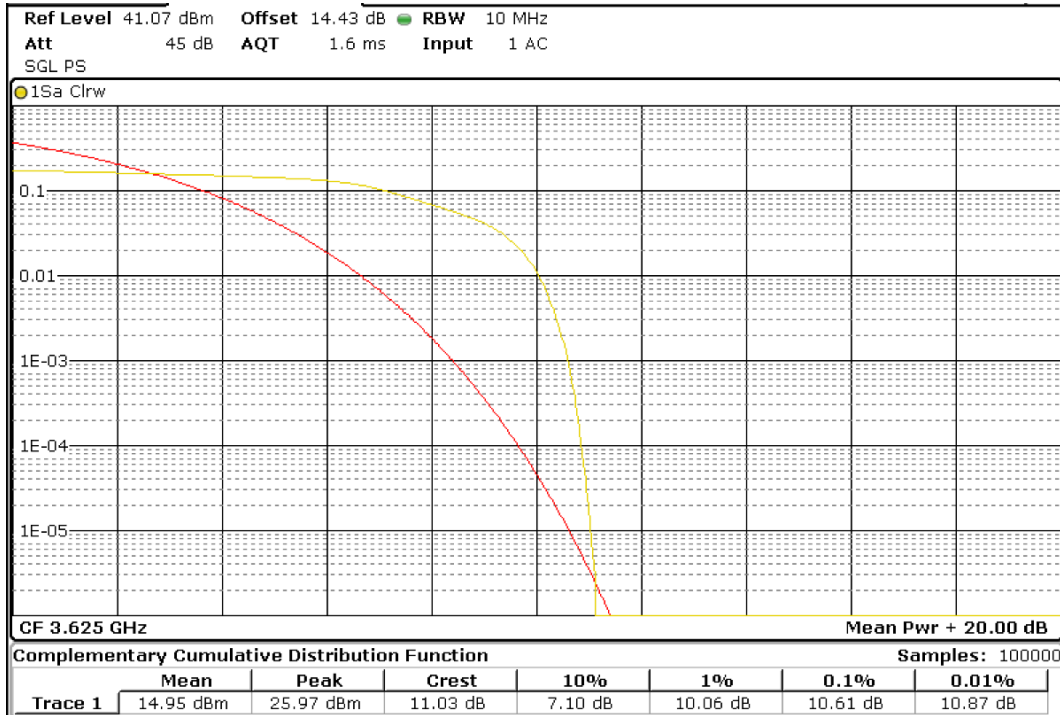
20 MHz BW

Lowest Channel (3560 MHz)

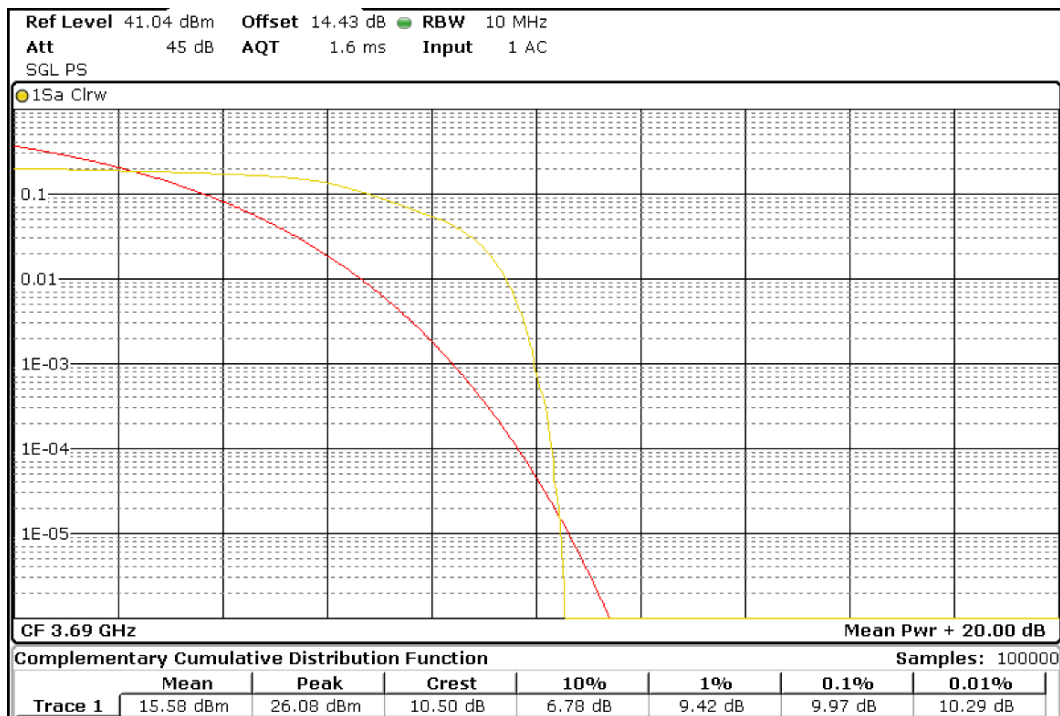


TEST RESULTS (Cont.):

Middle Channel (3625 MHz)



Highest Channel (3690 MHz)



TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#02 (Band 42)
TEST RESULTS:	PASS

Results:

5 MHz BW

	Lowest frequency 3552.5 MHz	Middle frequency 3575 MHz	Highest frequency 3597.5 MHz
Peak (dBm)	27.04	29.40	29.50
Mean (dBm)	16.64	18.06	18.49
PAPR at 0.1% probability (dB)	9.88	10.17	9.97
Measurement uncertainty (dB)	<±1.11		

10 MHz BW

	Lowest frequency 3555 MHz	Middle frequency 3575 MHz	Highest frequency 3595 MHz
Peak (dBm)	27.66	28.36	28.45
Mean (dBm)	16.98	16.57	17.12
PAPR at 0.1% probability (dB)	10.23	10.87	10.29
Measurement uncertainty (dB)	<±1.11		

15 MHz BW

	Lowest frequency 3557.5 MHz	Middle frequency 3575 MHz	Highest frequency 3592.5 MHz
Peak (dBm)	27.38	27.02	27.18
Mean (dBm)	16.23	15.83	15.70
PAPR at 0.1% probability (dB)	10.64	10.72	10.93
Measurement uncertainty (dB)	<±1.11		

20 MHz BW

	Lowest frequency 3560 MHz	Middle frequency 3575 MHz	Highest frequency 3590 MHz
Peak (dBm)	26.13	25.98	25.95
Mean (dBm)	15.53	15.23	15.09
PAPR at 0.1% probability (dB)	10.09	10.20	10.32
Measurement uncertainty (dB)	<±1.11		

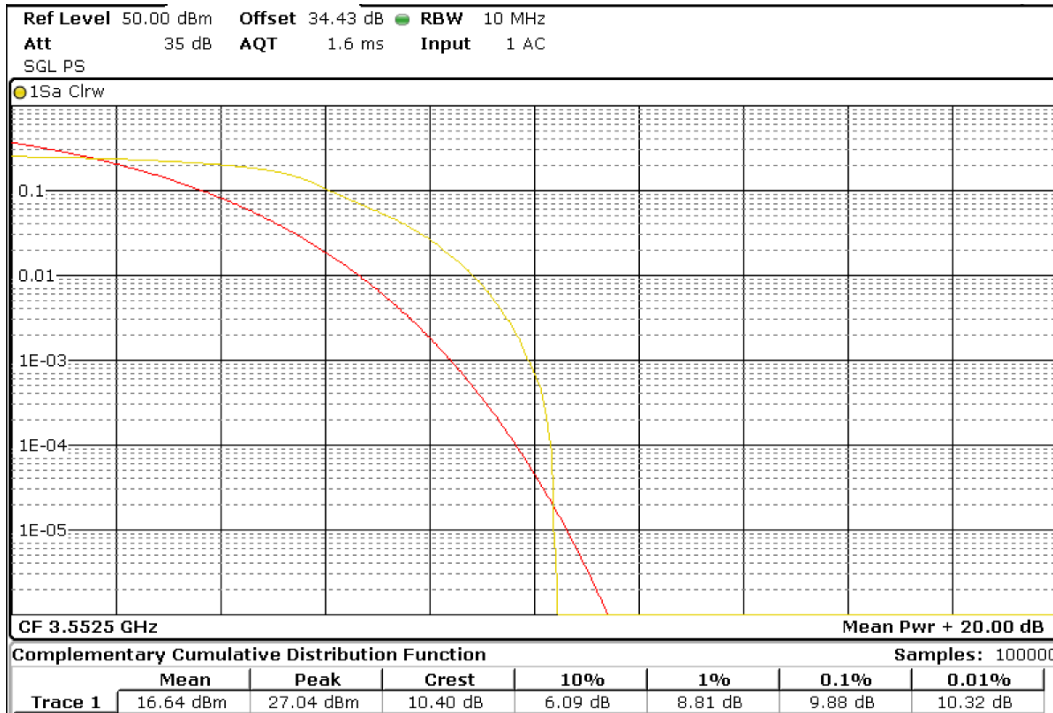
Verdict: PASS

(See next plots)

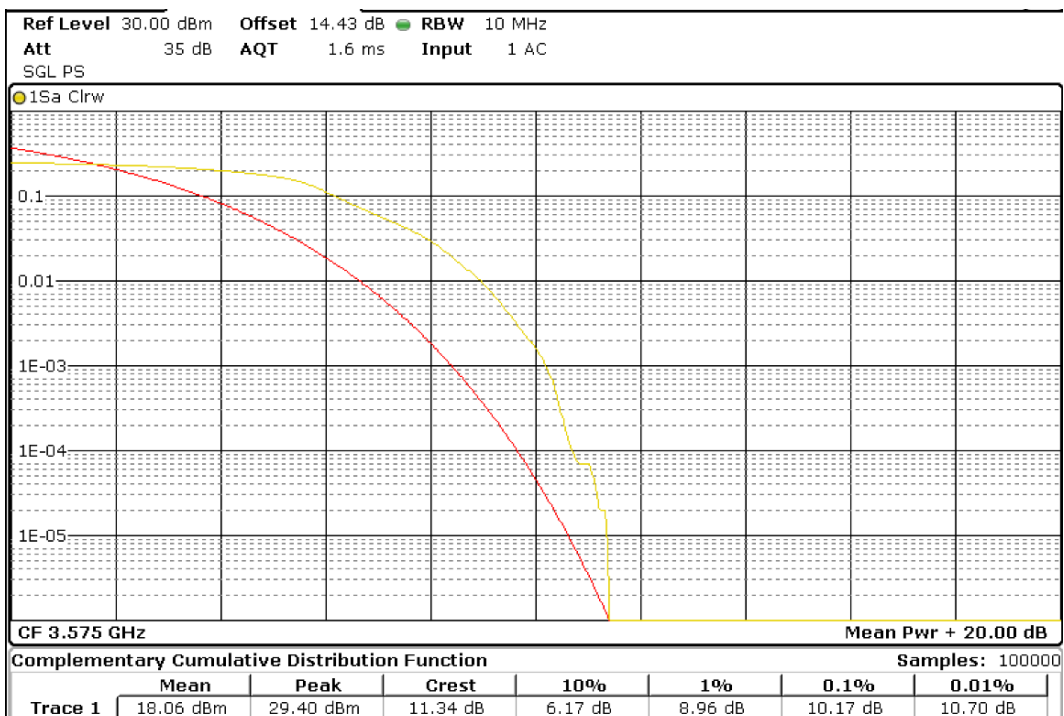
TEST RESULTS (Cont.):

5 MHz BW

Lowest Channel (3552.5 MHz)

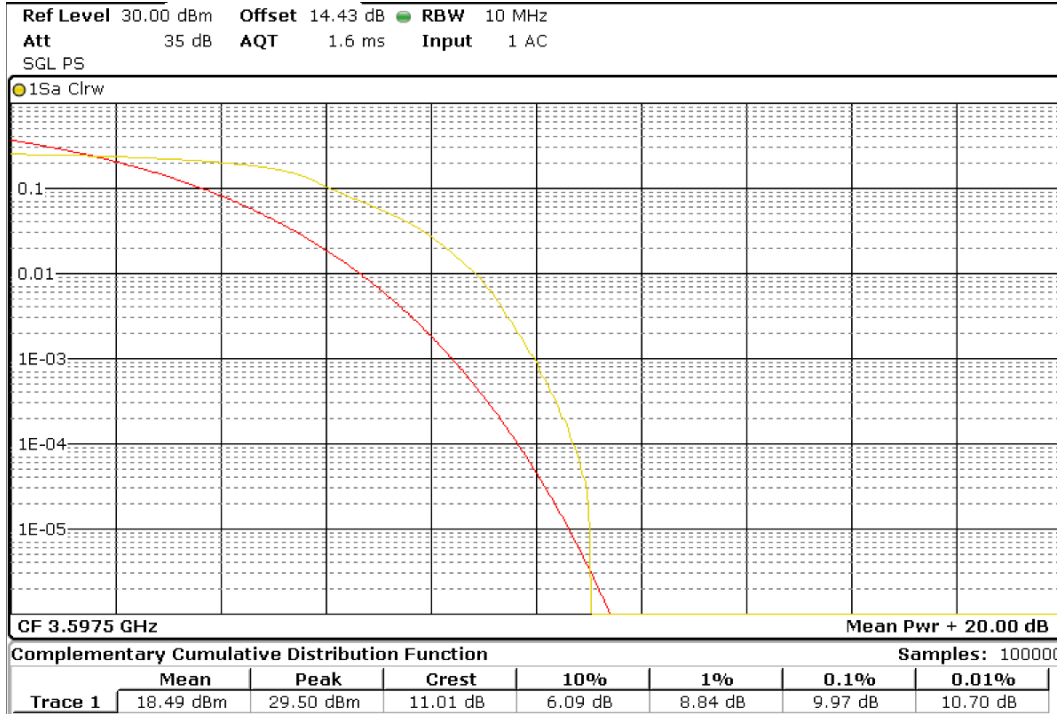


Middle Channel (3575 MHz)



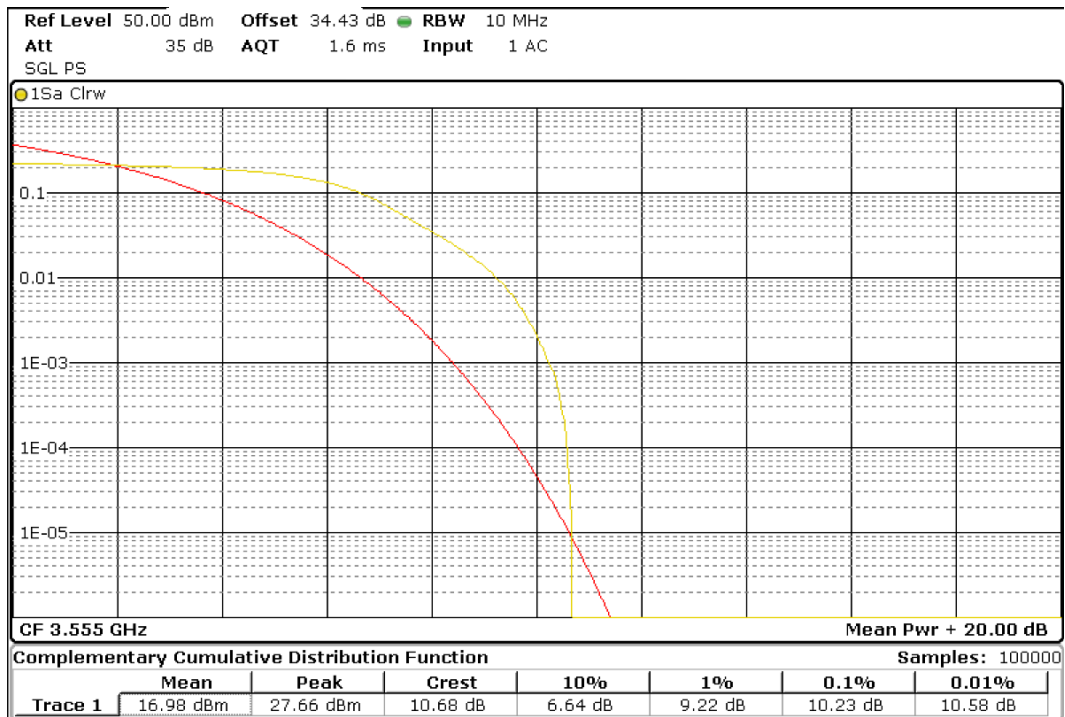
TEST RESULTS (Cont.):

Highest Channel (3597.5 MHz)



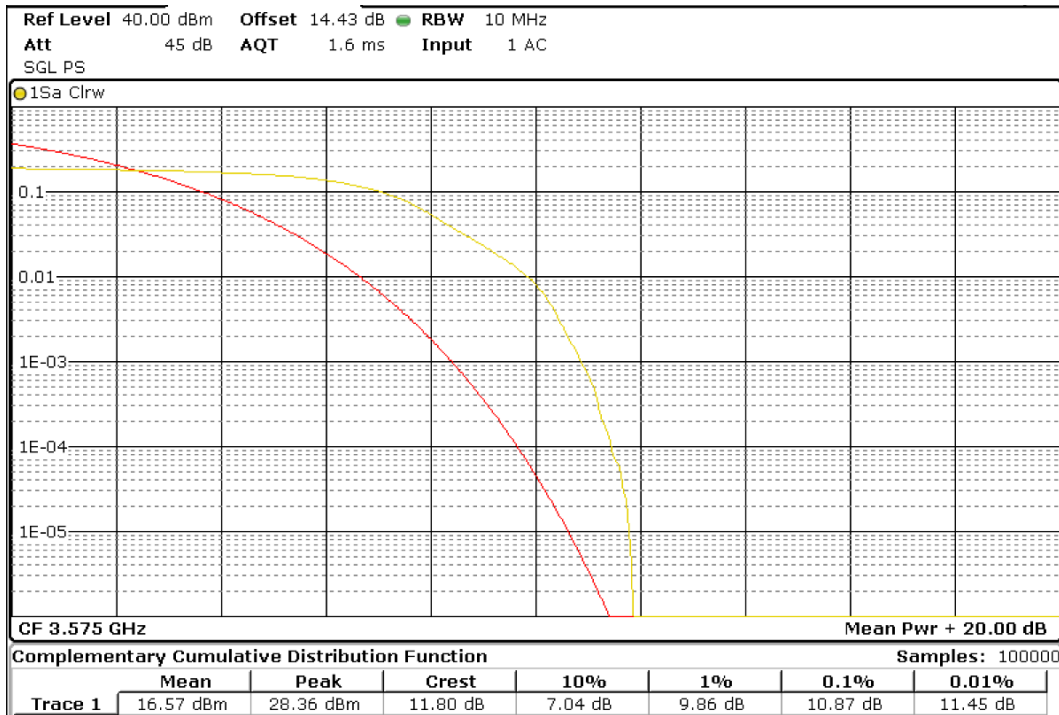
10 MHz BW

Lowest Channel (3555 MHz)

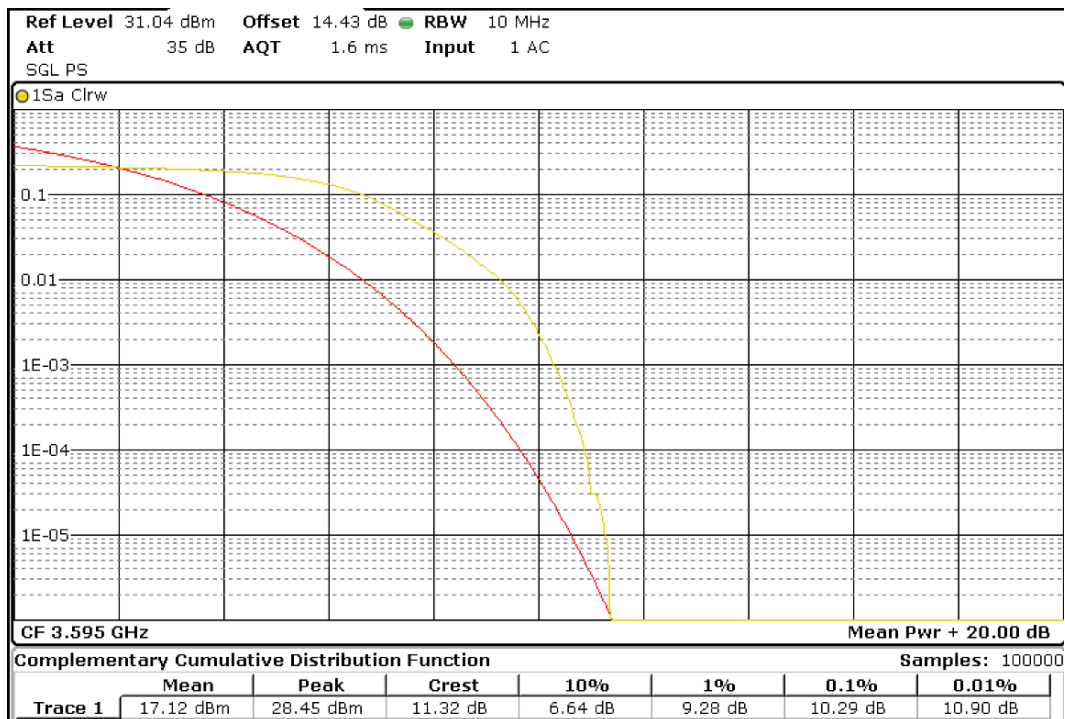


TEST RESULTS (Cont.):

Middle Channel (3575 MHz)



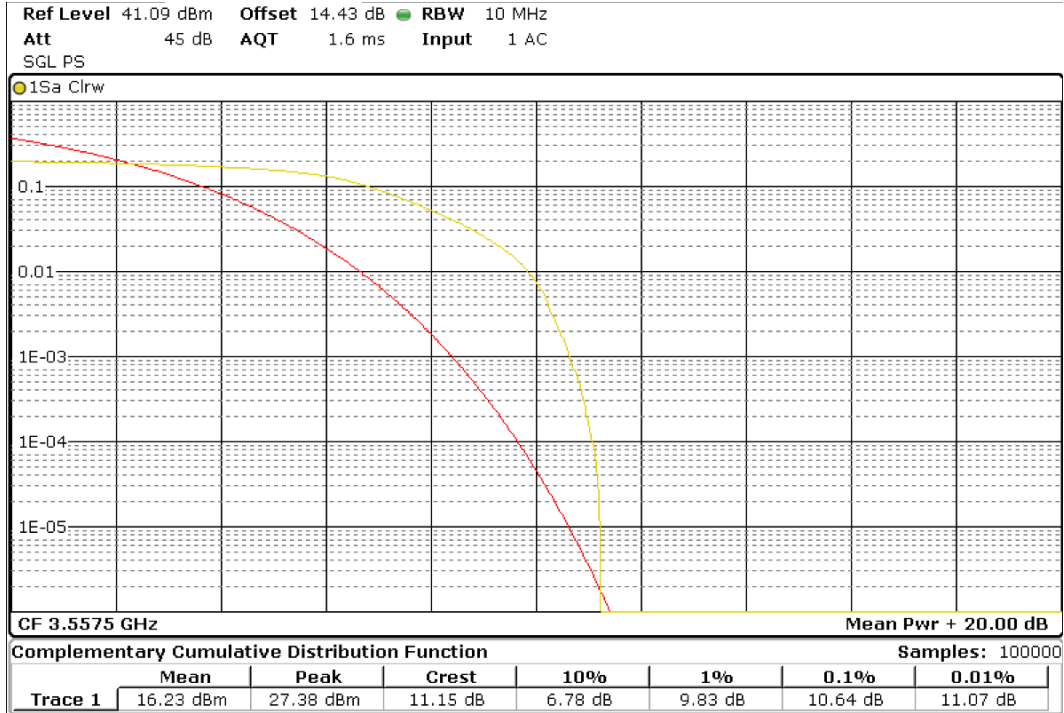
Highest Channel (3595 MHz)



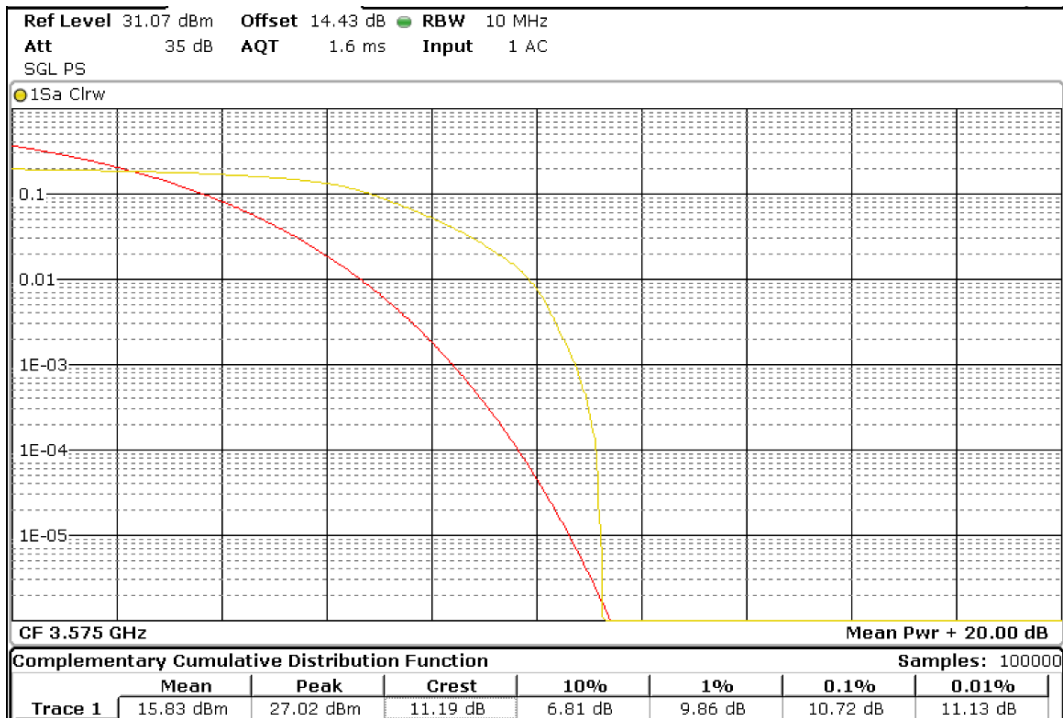
TEST RESULTS (Cont.):

15 MHz BW

Lowest Channel (3557.5 MHz)

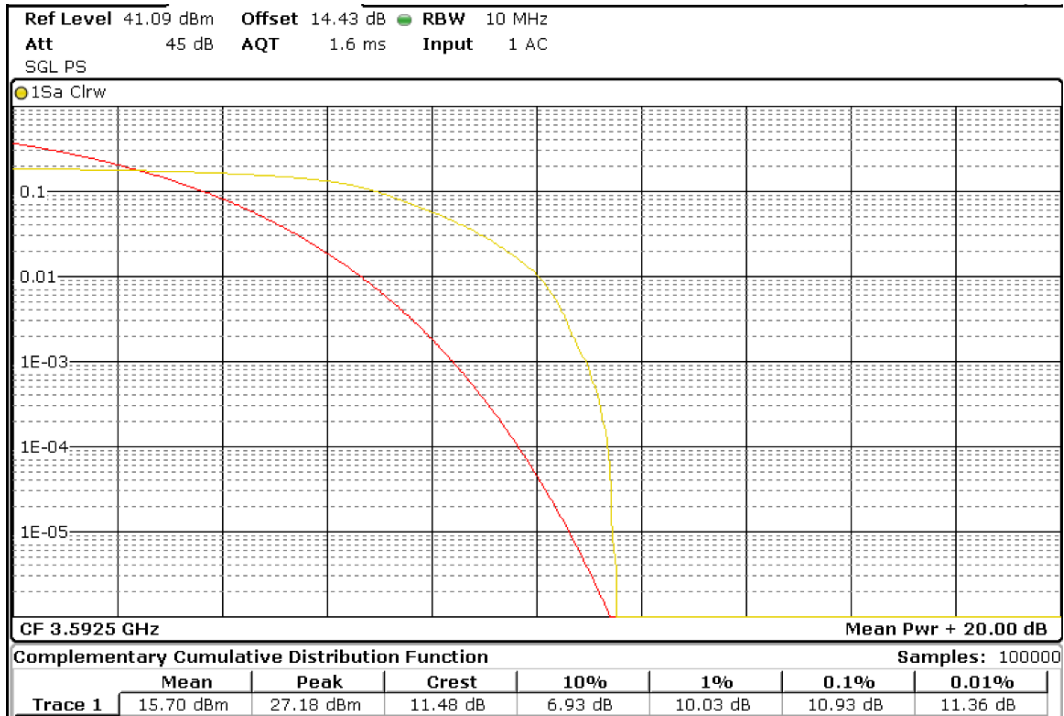


Middle Channel (3575 MHz)



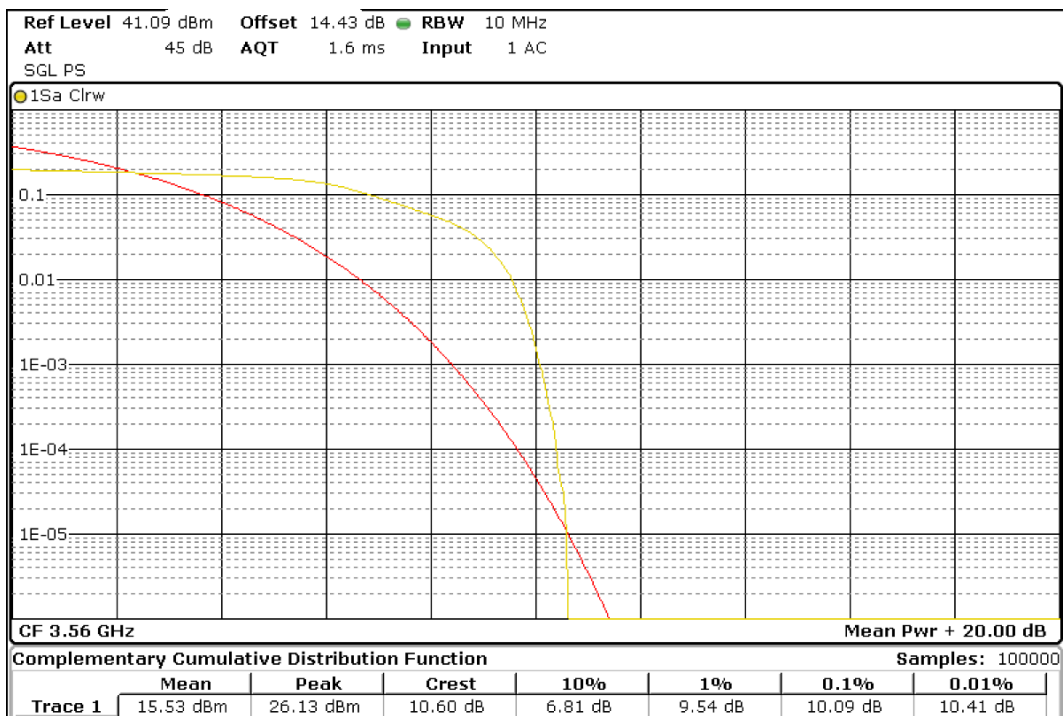
TEST RESULTS (Cont.):

Highest Channel (3592.5 MHz)



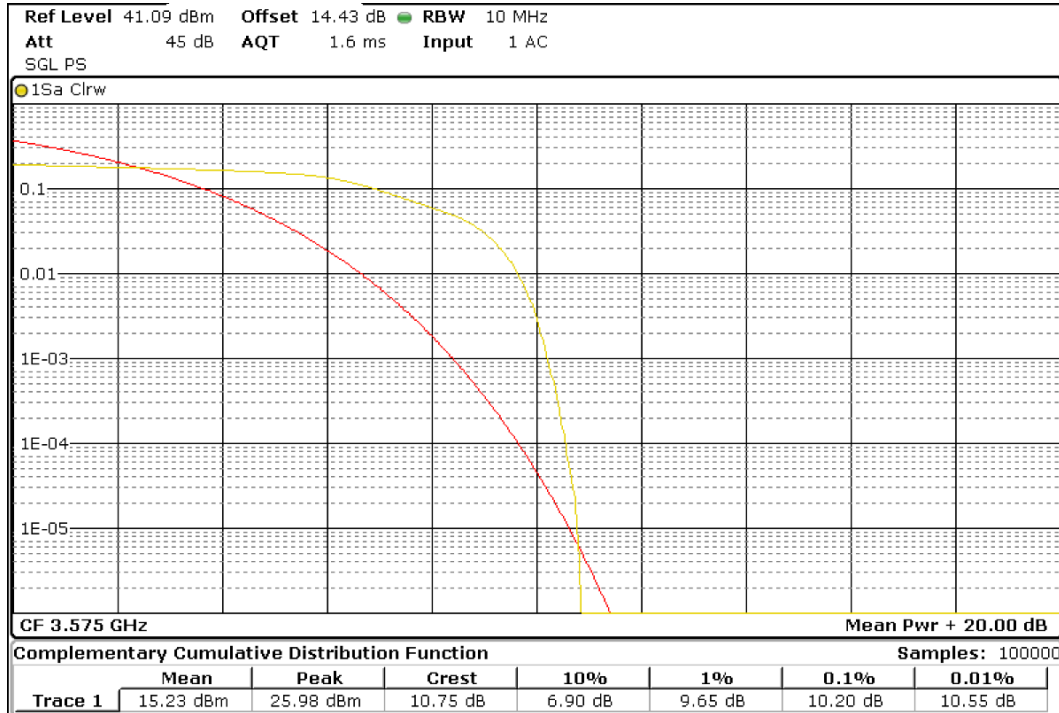
20 MHz BW

Lowest Channel (3560 MHz)

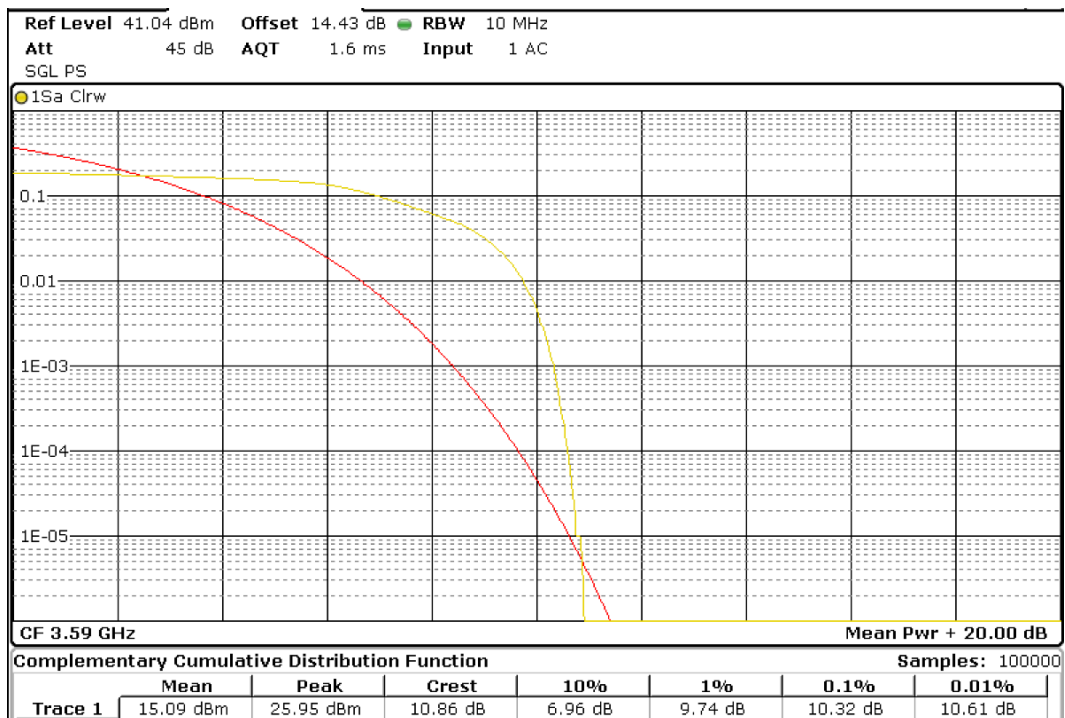


TEST RESULTS (Cont.):

Middle Channel (3575 MHz)



Highest Channel (3590 MHz)



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

Results:

5 MHz BW

	Lowest frequency 3602.5 MHz	Middle frequency 3650 MHz	Highest frequency 3697.5 MHz
Peak (dBm)	28.44	28.38	27.06
Mean (dBm)	17.12	16.89	16.50
PAPR at 0.1% probability (dB)	10.58	10.81	9.86
Measurement uncertainty (dB)	<±1.11		

10 MHz BW

	Lowest frequency 3605 MHz	Middle frequency 3650 MHz	Highest frequency 3695 MHz
Peak (dBm)	27.67	27.53	28.33
Mean (dBm)	16.73	16.07	17.27
PAPR at 0.1% probability (dB)	10.26	10.67	10.38
Measurement uncertainty (dB)	<±1.11		

15 MHz BW

	Lowest frequency 3607.5 MHz	Middle frequency 3650 MHz	Highest frequency 3692.5 MHz
Peak (dBm)	26.43	26.38	27.12
Mean (dBm)	15.53	15.72	16.63
PAPR at 0.1% probability (dB)	10.49	10.26	10.06
Measurement uncertainty (dB)	<±1.11		

20 MHz BW

	Lowest frequency 3610 MHz	Middle frequency 3650 MHz	Highest frequency 3690 MHz
Peak (dBm)	25.12	25.17	26.08
Mean (dBm)	14.34	13.99	15.58
PAPR at 0.1% probability (dB)	10.32	10.78	9.97
Measurement uncertainty (dB)	<±1.11		

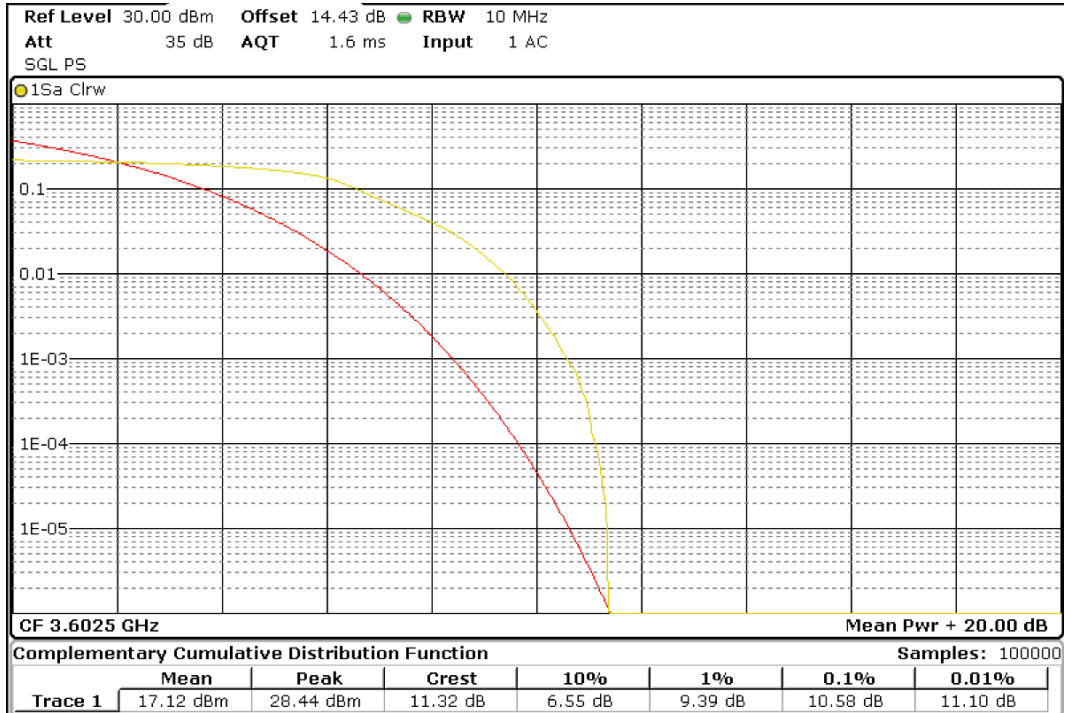
Verdict: PASS

(See next plots)

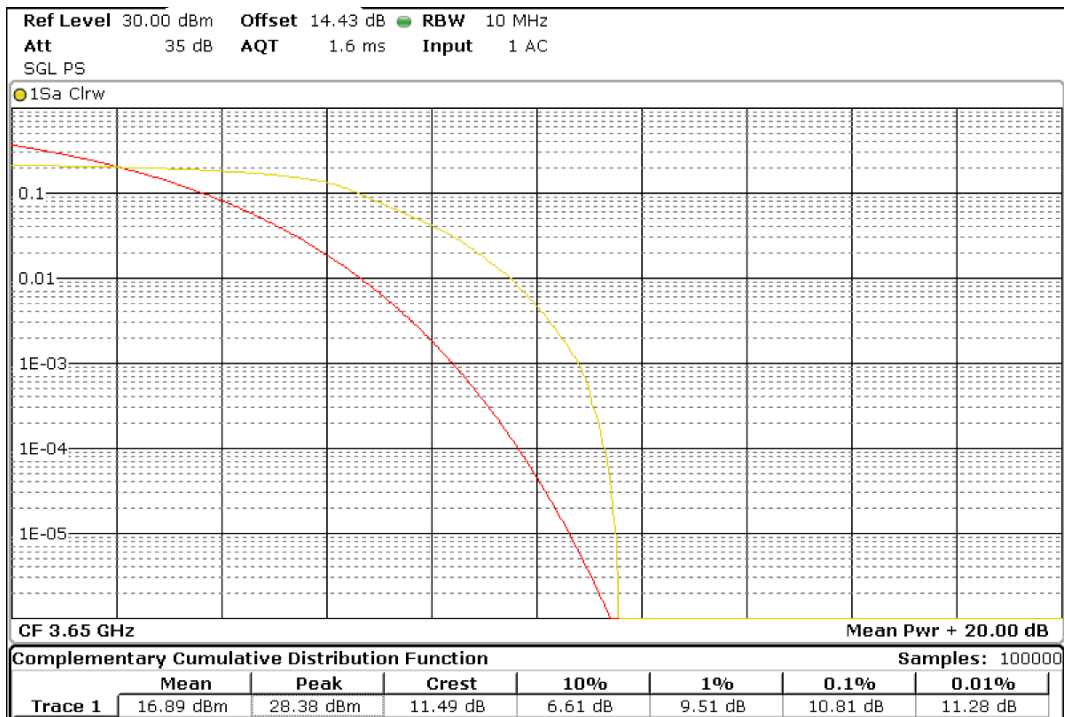
TEST RESULTS (Cont.):

5 MHz BW

Lowest Channel (3602.5 MHz)

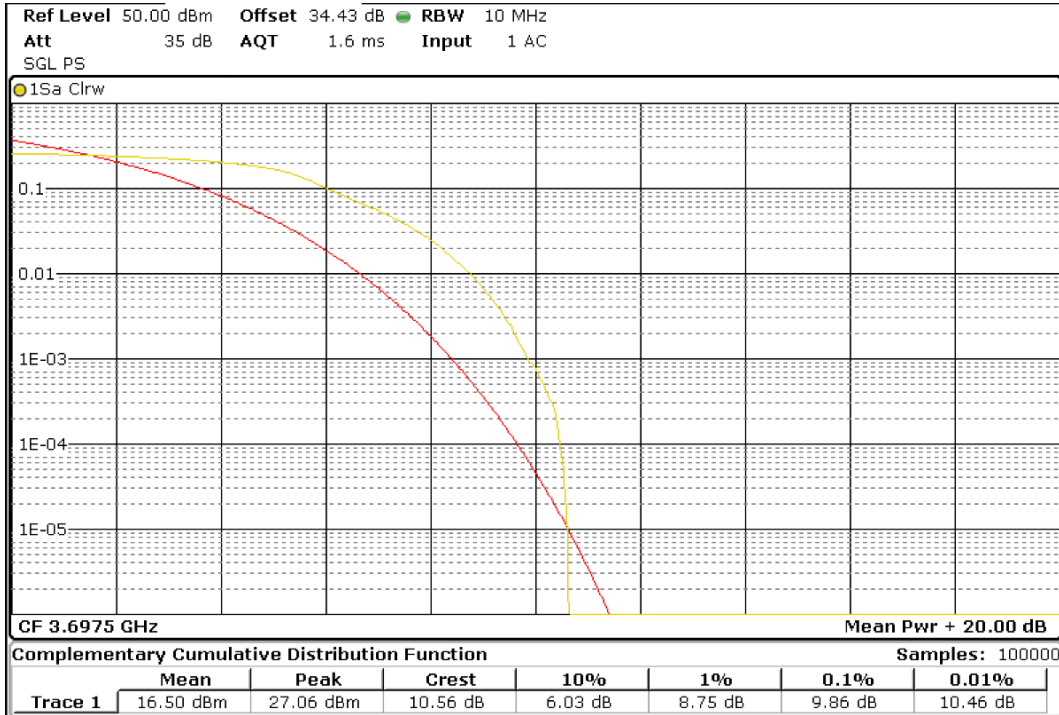


Middle Channel (3650 MHz)



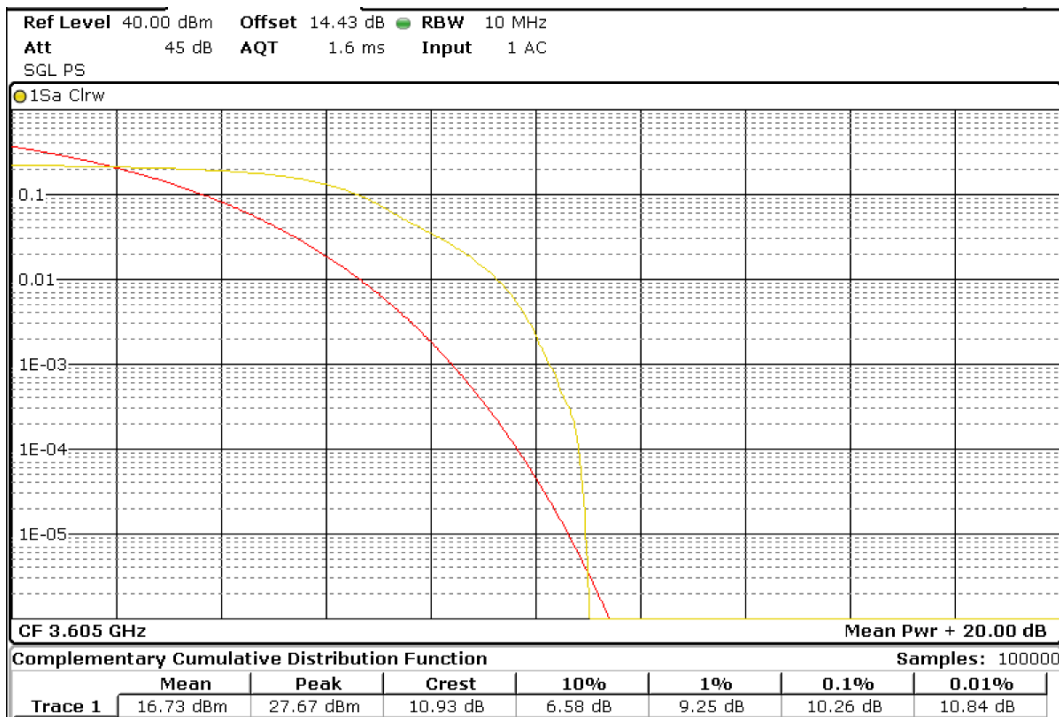
TEST RESULTS (Cont.):

Highest Channel (3697.5 MHz)



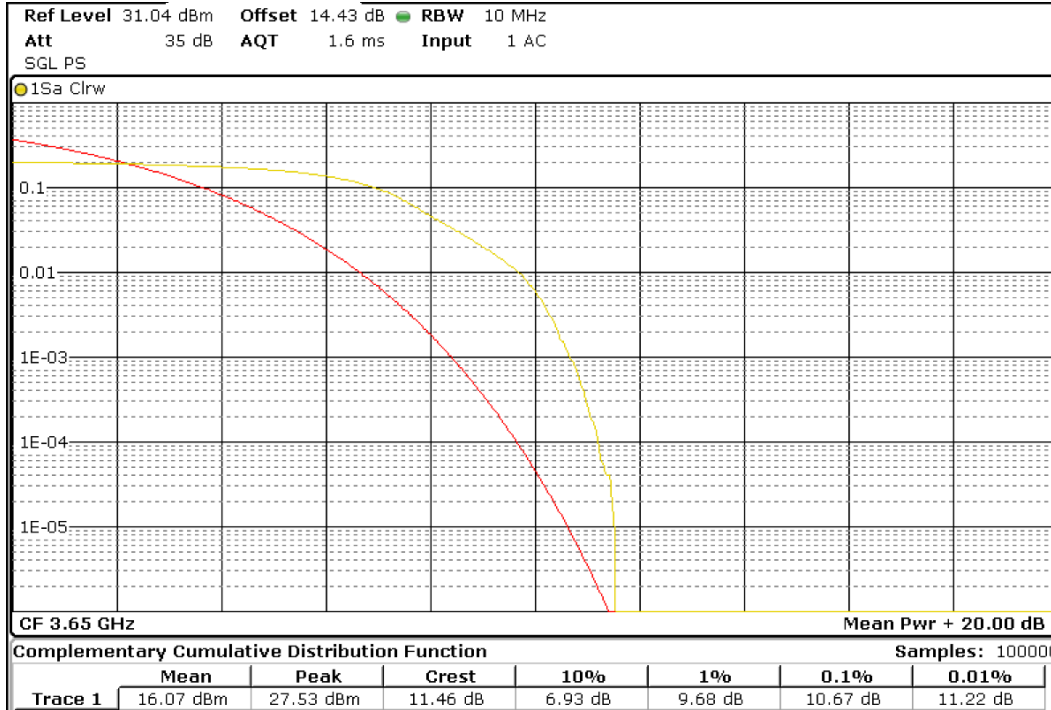
10 MHz BW

Lowest Channel (3605 MHz)

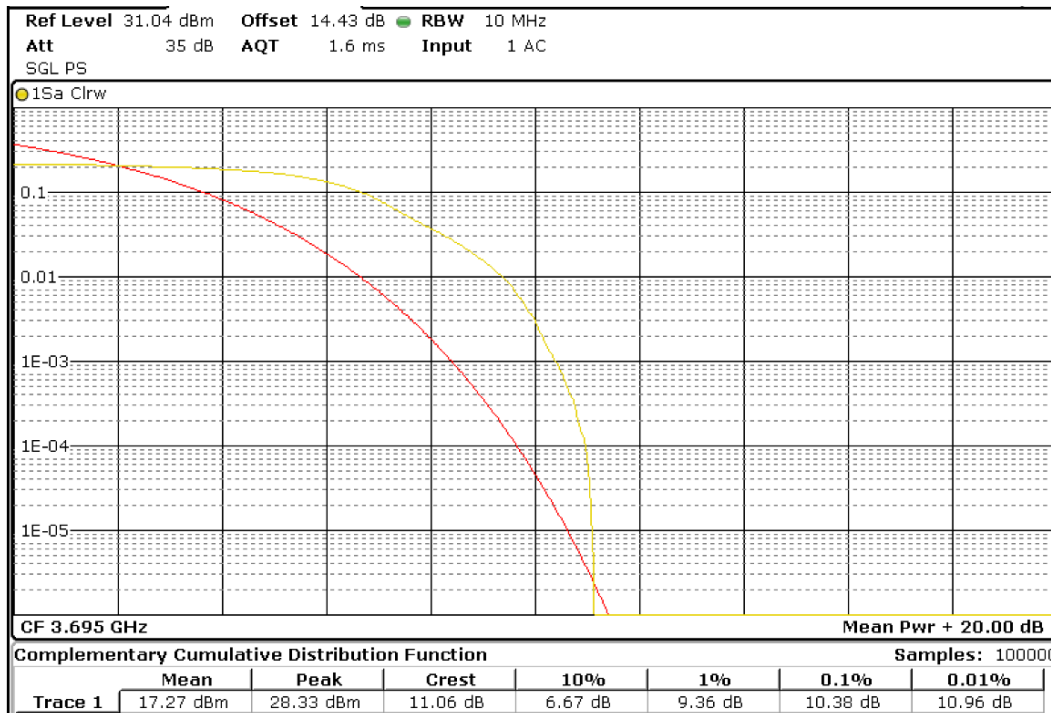


TEST RESULTS (Cont.):

Middle Channel (3650 MHz)



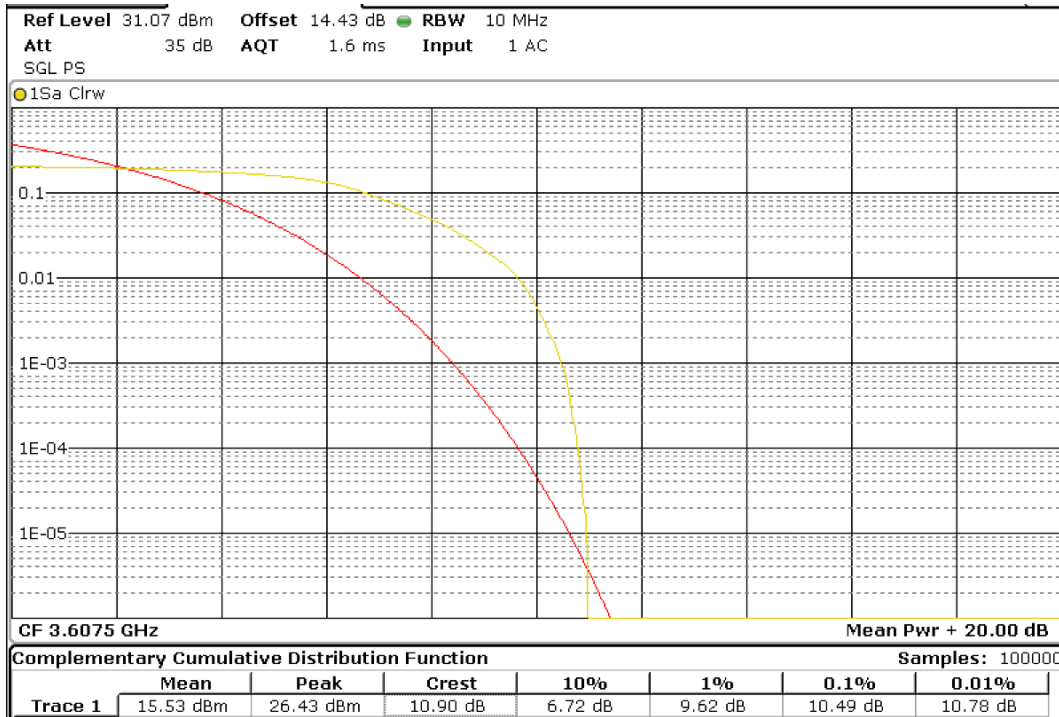
Highest Channel (3695 MHz)



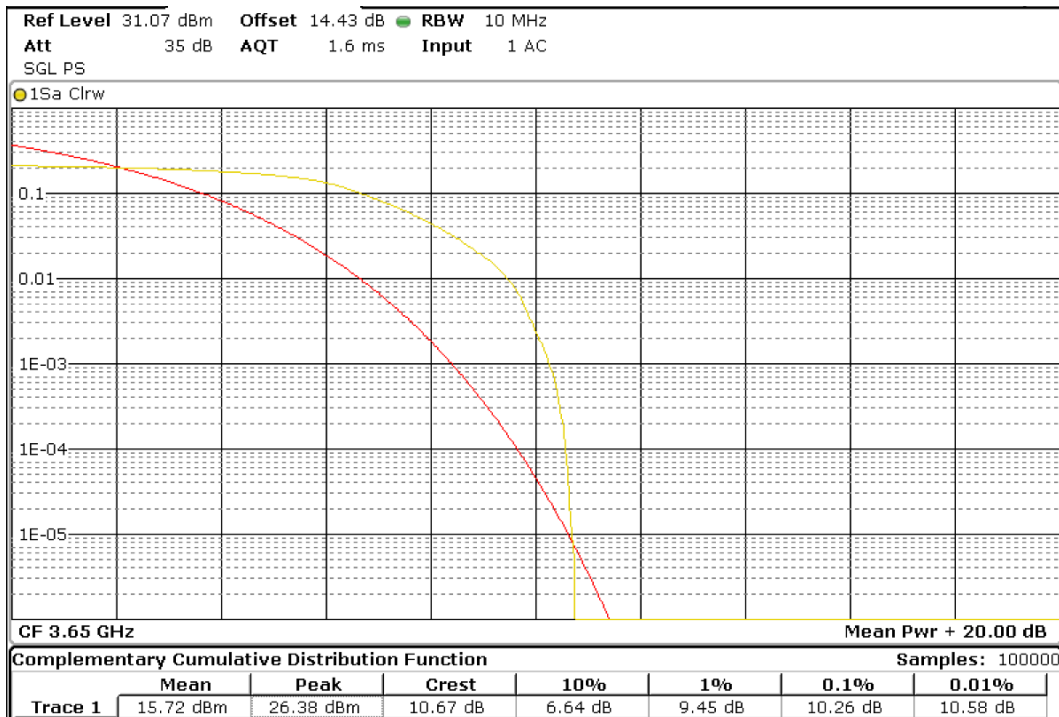
TEST RESULTS (Cont.):

15 MHz BW

Lowest Channel (3607.5 MHz)

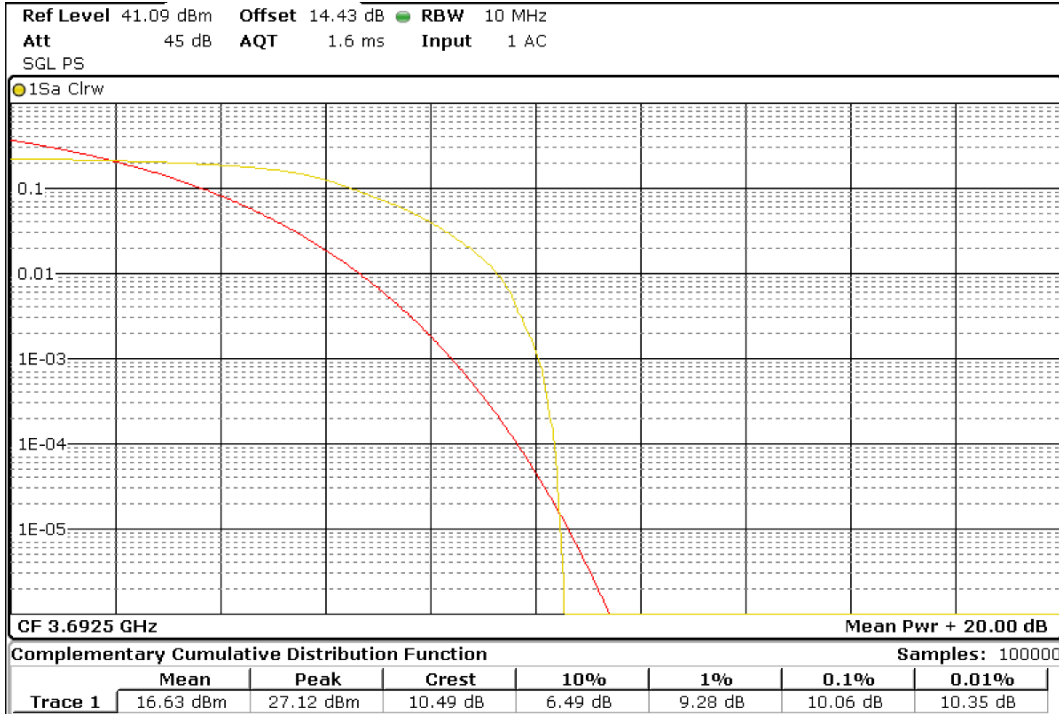


Middle Channel (3650 MHz)



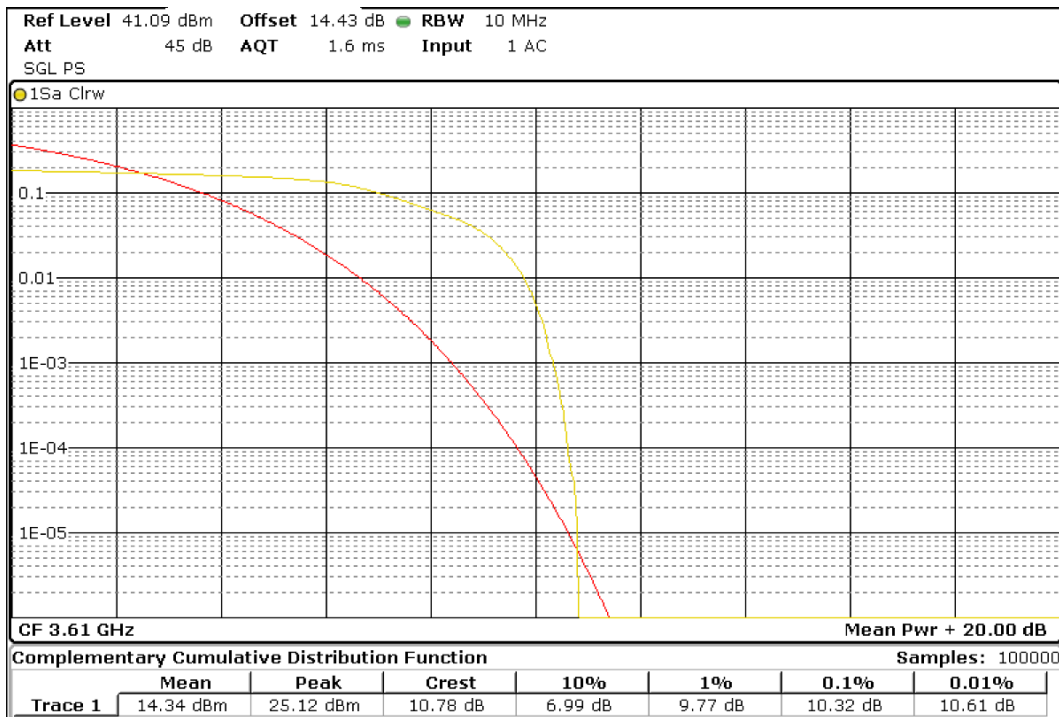
TEST RESULTS (Cont.):

Highest Channel (3692.5 MHz)



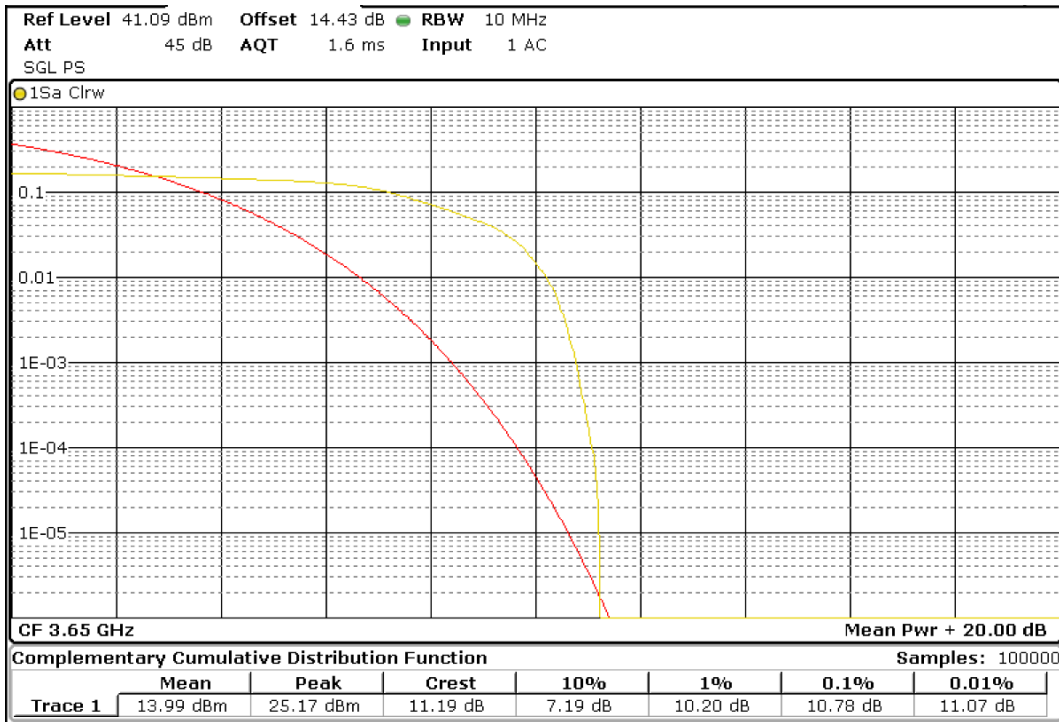
20 MHz BW

Lowest Channel (3610 MHz)

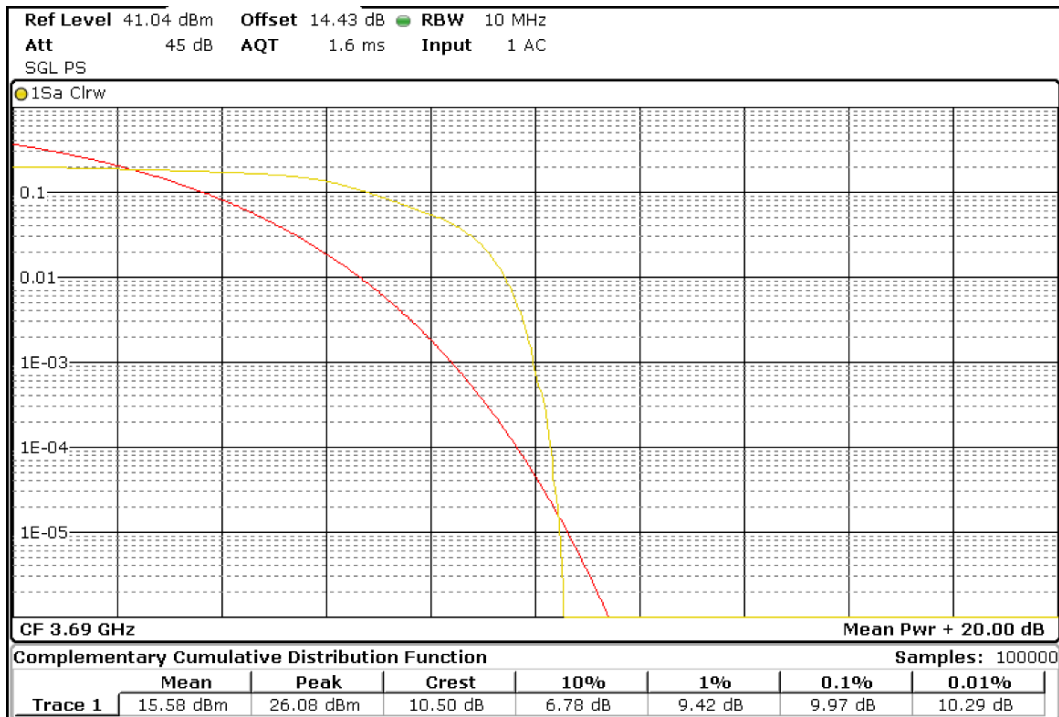


TEST RESULTS (Cont.):

Middle Channel (3650 MHz)



Highest Channel (3690 MHz)



TEST A.6: 3.5 GHZ EMISSION AND INTERFERENCE LIMITS

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

LIMITS

The radio frequency voltage or powers generated within the equipment and appearing on a spurious frequency shall be checked at the equipment output terminals when properly loaded with a suitable artificial antenna. Curves or equivalent data shall show the magnitude of each harmonic and other spurious emission that can be detected when the equipment is operated under the conditions specified in § 2.1049 as appropriate. The magnitude of spurious emissions which are attenuated more than 20 dB below the permissible value need not be specified.

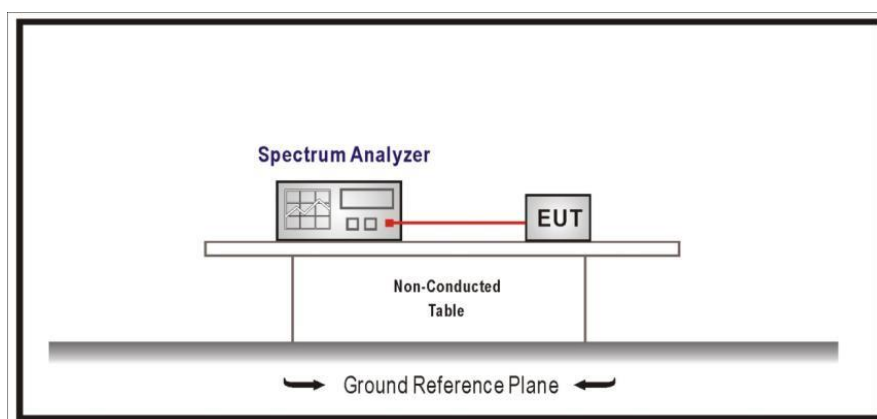
Confirm that the device satisfies the emission limits specified in Section 96.41(e) for all declared channel sizes, at the lowest and highest edges of the band, and in the middle of the band. The RMS detector was used for the measurement at each frequency with 400 MHz span.

A narrower RBW is permitted in all cases to improve measurement accuracy, provided the measured power is integrated over the full reference bandwidth.

The limits for emission outside the fundamental are stated below.

- within 0-10 MHz above and below the assigned channel ≤ -13 dBm/MHz
- greater than 10 MHz above and below the assigned channel ≤ -25 dBm/MHz
- any emission below 3530 MHz and above 3720 MHz ≤ -40 dBm/MHz

TEST SETUP



The following duty cycle correction was added in RF level offset to get the accurate measured emission level in the average power measurement.

The duty cycle correction = $10 \log (1/0.63) = 2.02$ (dB)

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

Results:

5 MHz BW

Lowest 3552.5 MHz		Middle 3625 MHz		Highest 3697.5 MHz	
Spurious Frequency (MHz)	Emission Level (dBm/MHz)	Spurious Frequency (MHz)	Emission Level (dBm/MHz)	Spurious Frequency (MHz)	Emission Level (dBm/MHz)
3413.08	-49.73	3760.72	-50.34	3832.87	-50.27
3416.68	-49.56			3837.15	-50.30
Measurement uncertainty (dB)					<± 2.03

10 MHz BW

Lowest 3555 MHz		Middle 3625 MHz		Highest 3695 MHz	
Spurious Frequency (MHz)	Emission Level (dBm/MHz)	Spurious Frequency (MHz)	Emission Level (dBm/MHz)	Spurious Frequency (MHz)	Emission Level (dBm/MHz)
3413.52	-45.97	3483.38	-46.34	3828.46	-44.78
3421.08	-45.15	3491.46	-45.62	3836.54	-45.24
		3758.34	-44.48		
		3766.46	-44.69		
Measurement uncertainty (dB)					<± 2.03

15 MHz BW

No conducted spurious signal was detected for the lowest, middle and highest operating channels.

20 MHz BW

No conducted spurious signal was detected for the lowest, middle and highest operating channels.

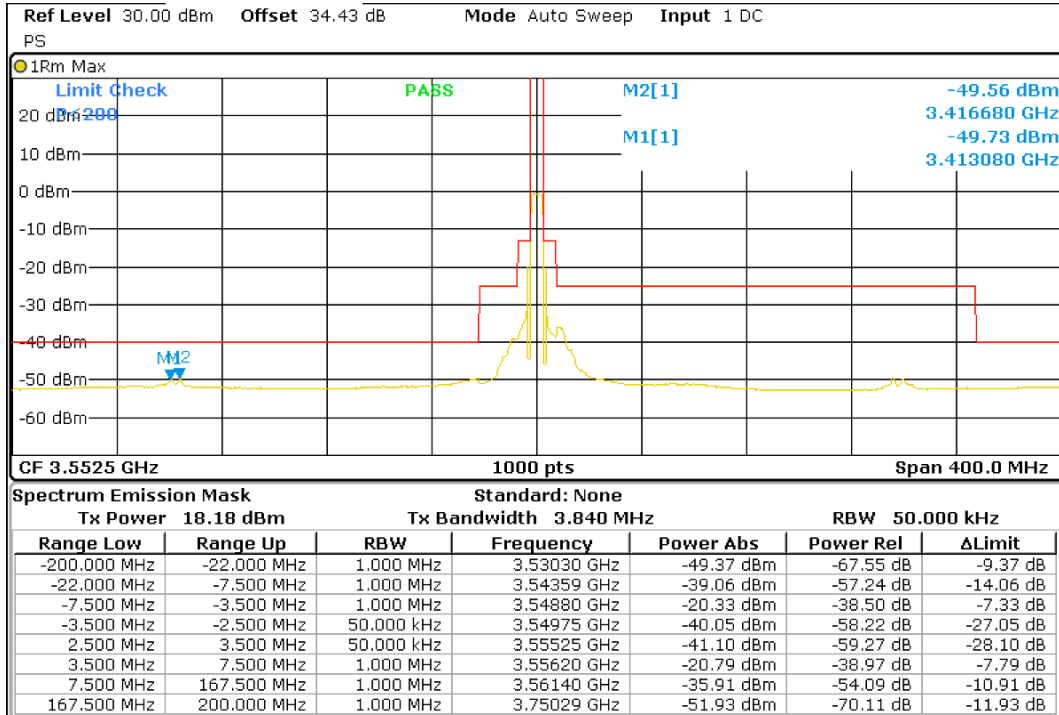
Verdict: PASS

(See next plots)

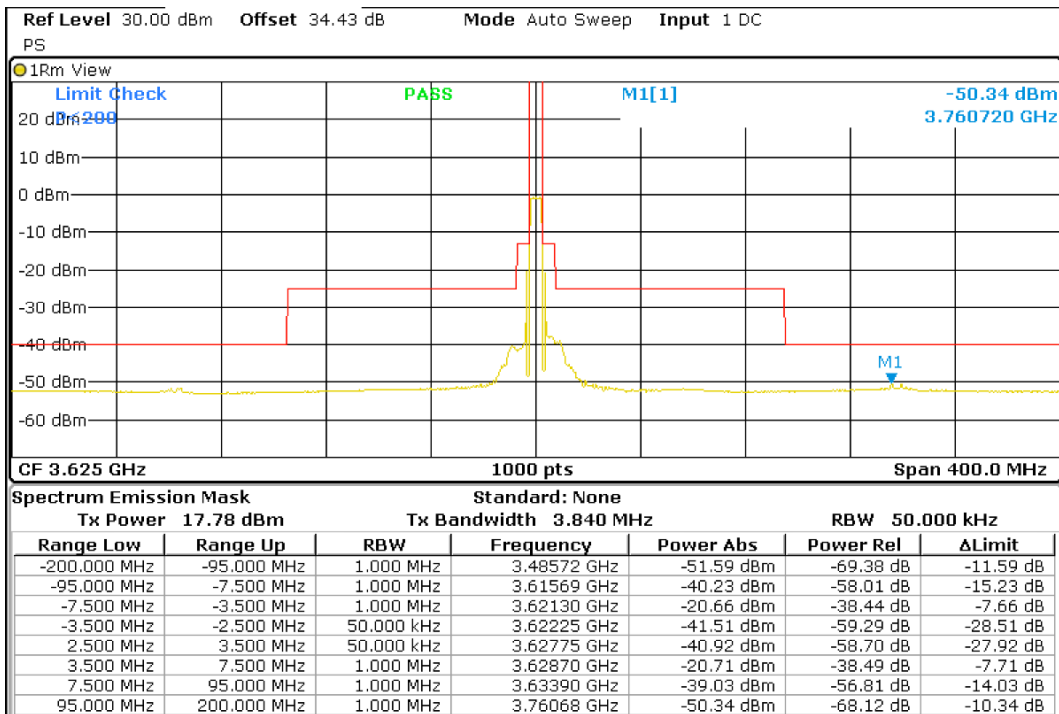
TEST RESULTS (Cont.):

5 MHz BW

Lowest Channel (3552.5 MHz)

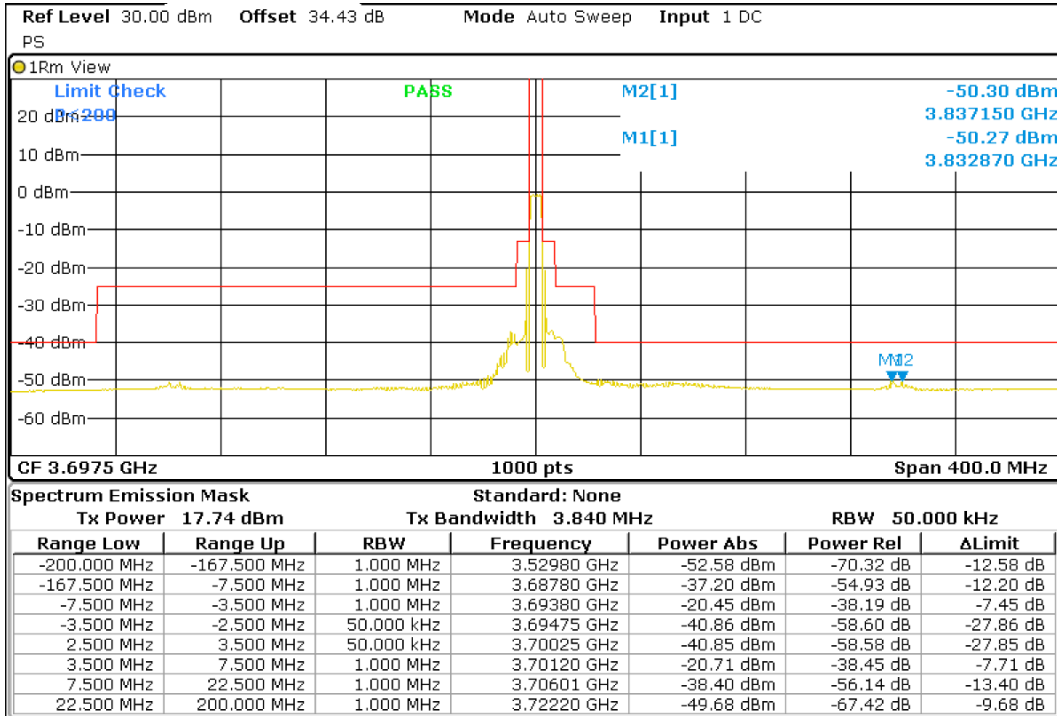


Middle Channel (3625 MHz)



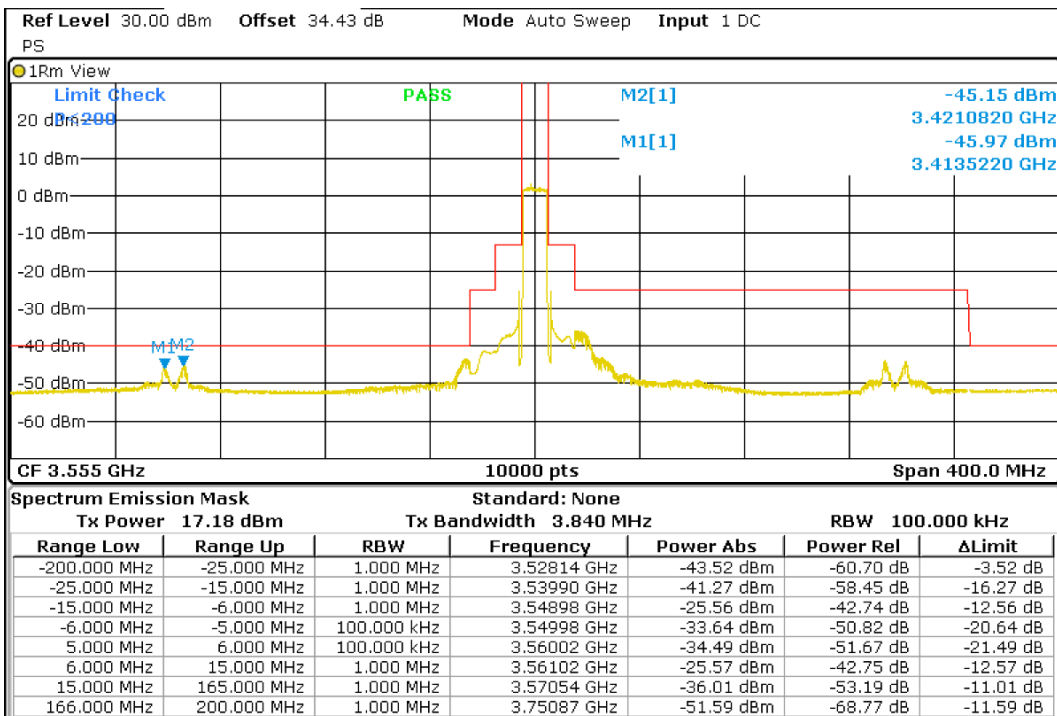
TEST RESULTS (Cont.):

Highest Channel (3697.5 MHz)



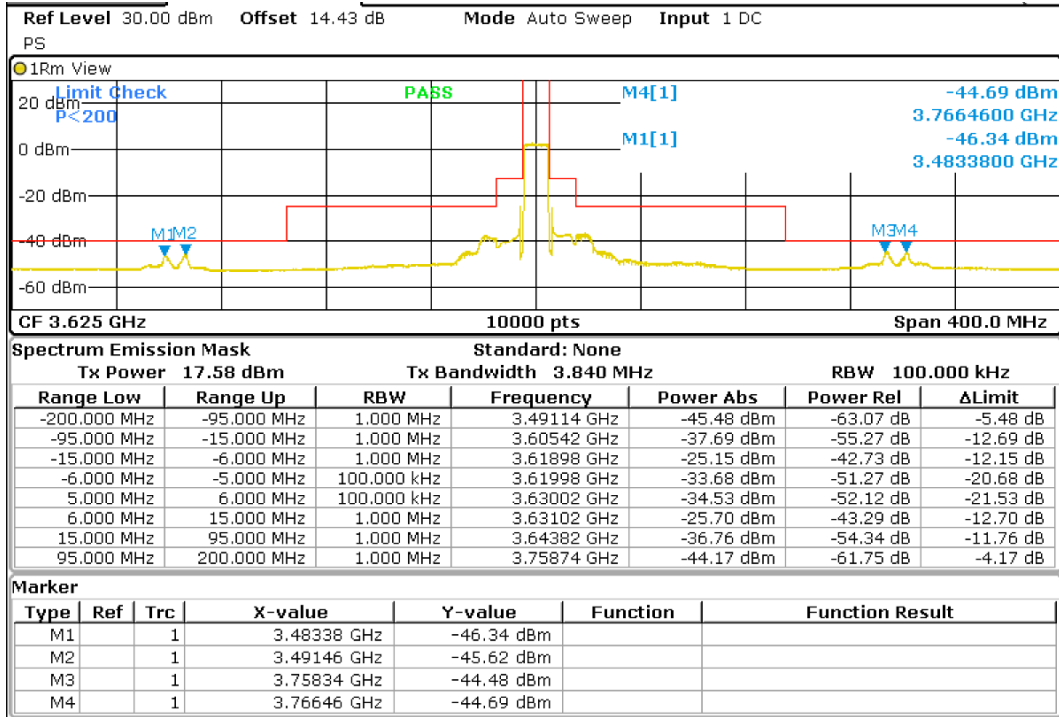
10 MHz BW

Lowest Channel (3555 MHz)

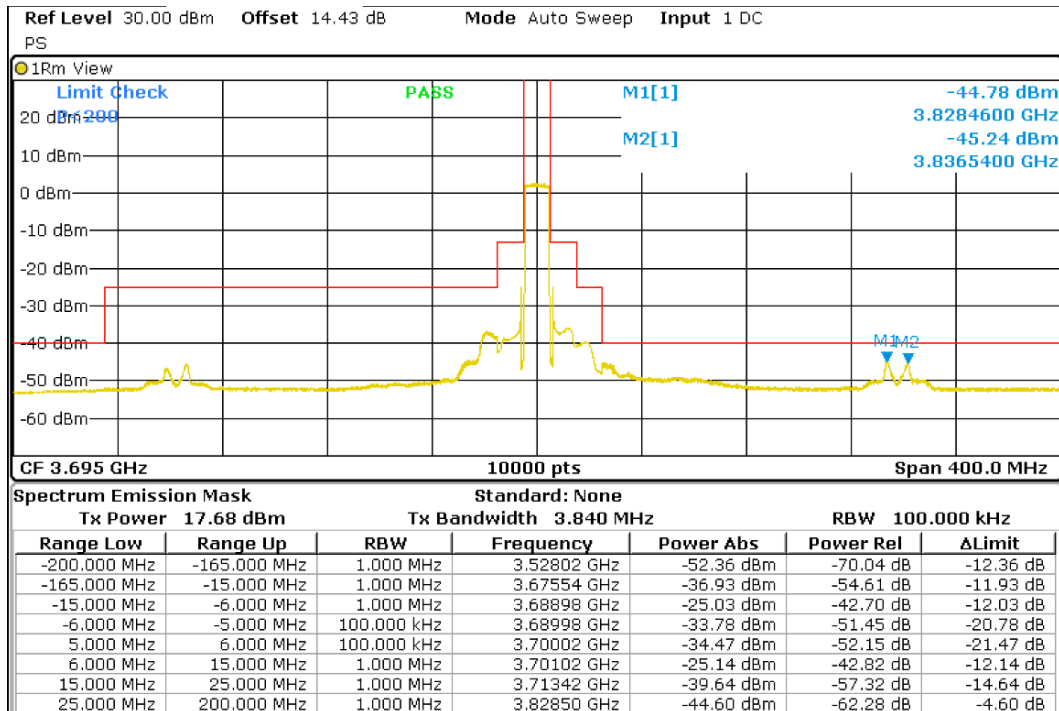


TEST RESULTS (Cont.):

Middle Channel (3625 MHz)



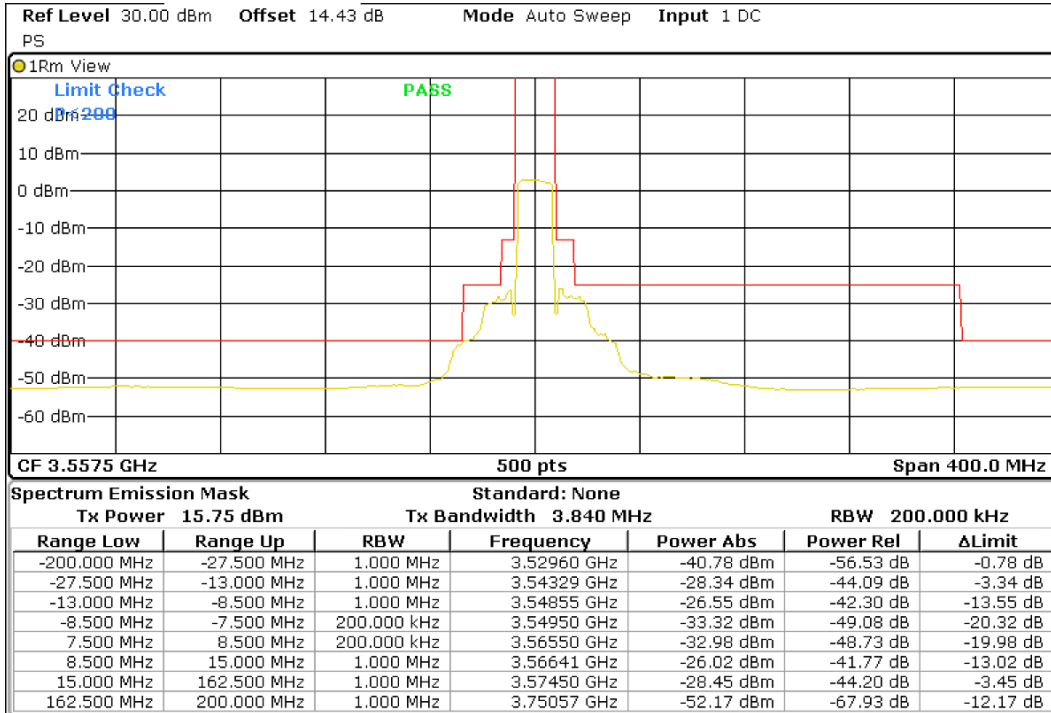
Highest Channel (3695 MHz)



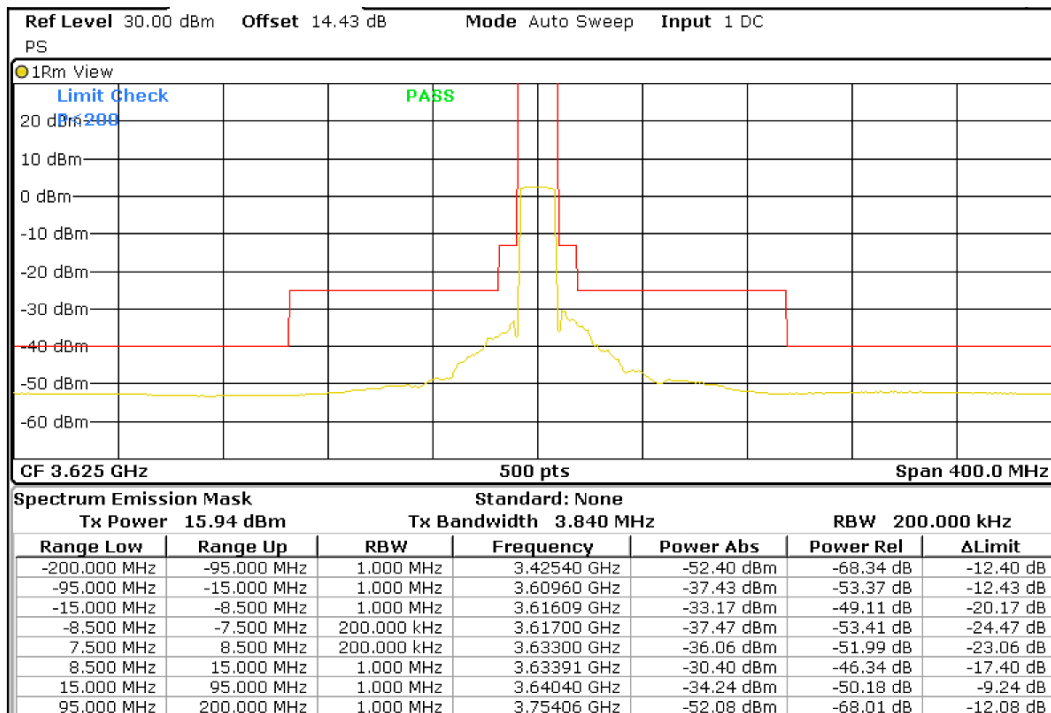
TEST RESULTS (Cont.):

15 MHz BW

Lowest Channel (3557.5 MHz)

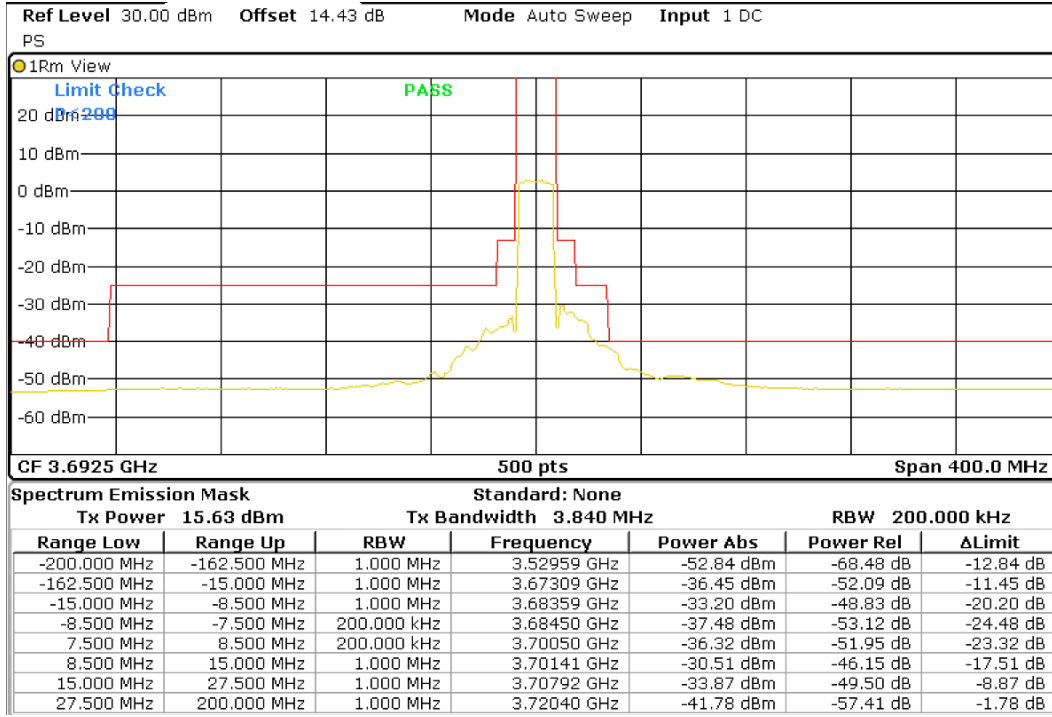


Middle Channel (3625 MHz)



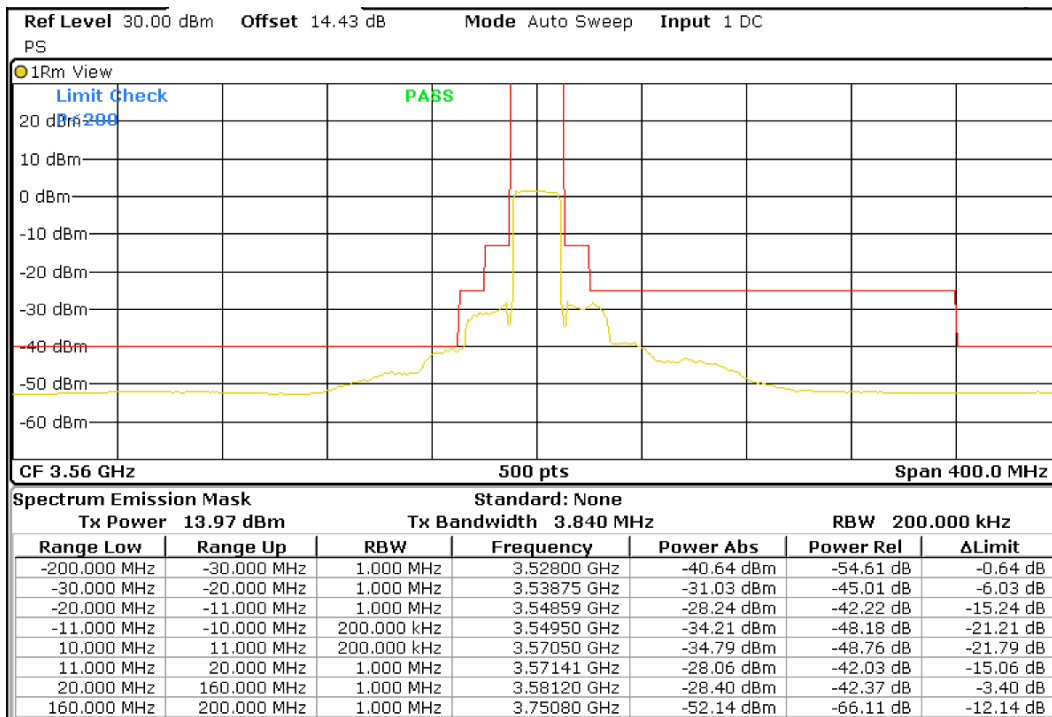
TEST RESULTS (Cont.):

Highest Channel (3692.5 MHz)



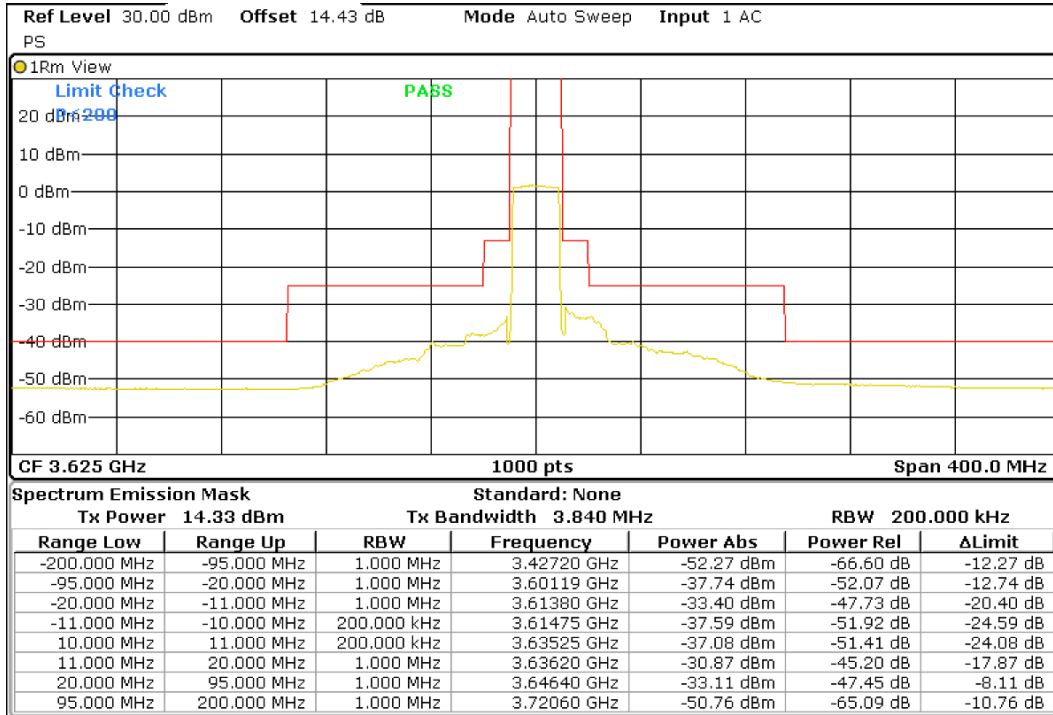
20 MHz BW

Lowest Channel (3560 MHz)

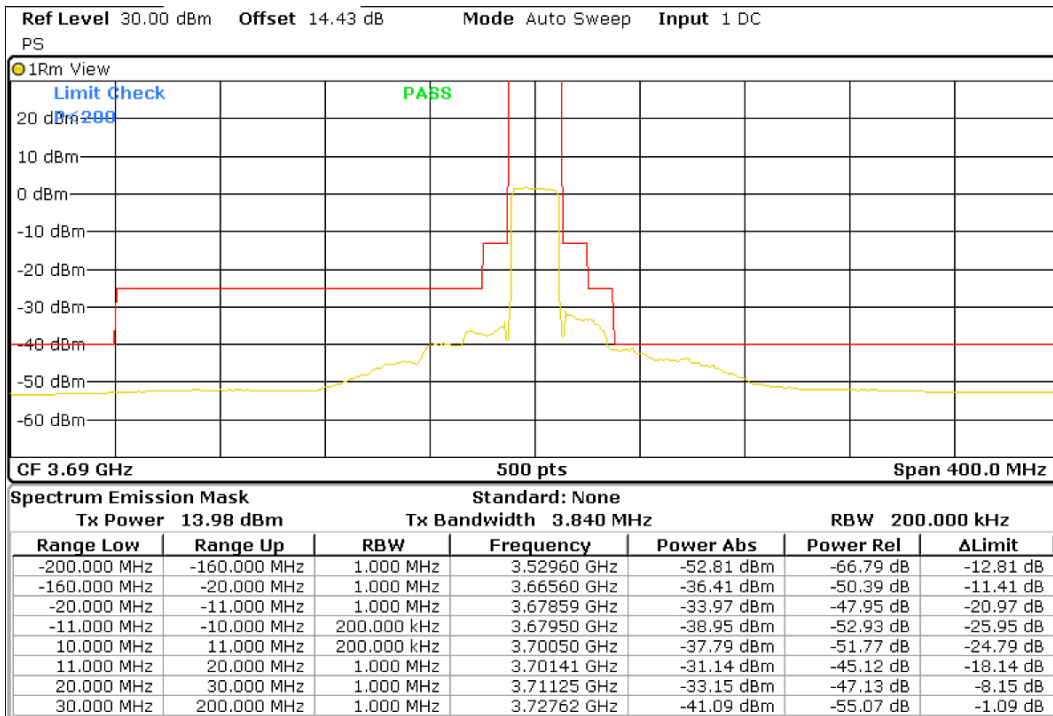


TEST RESULTS (Cont.):

Middle Channel (3625 MHz)



Highest Channel (3690 MHz)



TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#02 (Band 42)
TEST RESULTS:	PASS

Results:

5 MHz BW

Lowest 3552.5 MHz		Middle 3575 MHz		Highest 3597.5 MHz	
Spurious Frequency (MHz)	Emission Level (dBm/MHz)	Spurious Frequency (MHz)	Emission Level (dBm/MHz)	Spurious Frequency (MHz)	Emission Level (dBm/MHz)
3413.08	-49.73	3435.52	-49.68	3733.30	-50.50
3416.68	-49.56	3439.20	-49.19	3736.90	-50.29
				3457.97	-49.96
				3461.17	-50.05
Measurement uncertainty (dB)					<± 2.03

10 MHz BW

Lowest 3555 MHz		Middle 3575 MHz		Highest 3595 MHz	
Spurious Frequency (MHz)	Emission Level (dBm/MHz)	Spurious Frequency (MHz)	Emission Level (dBm/MHz)	Spurious Frequency (MHz)	Emission Level (dBm/MHz)
3413.52	-45.97	3433.12	-46.60	3453.60	-47.90
3421.08	-45.15	3441.48	-45.87	3461.20	-46.18
				3728.55	-47.58
				3736.15	-47.80
Measurement uncertainty (dB)					<± 2.03

15 MHz BW

No conducted spurious signal was detected for the lowest, middle and highest operating channels.

20 MHz BW

No conducted spurious signal was detected for the lowest, middle and highest operating channels.

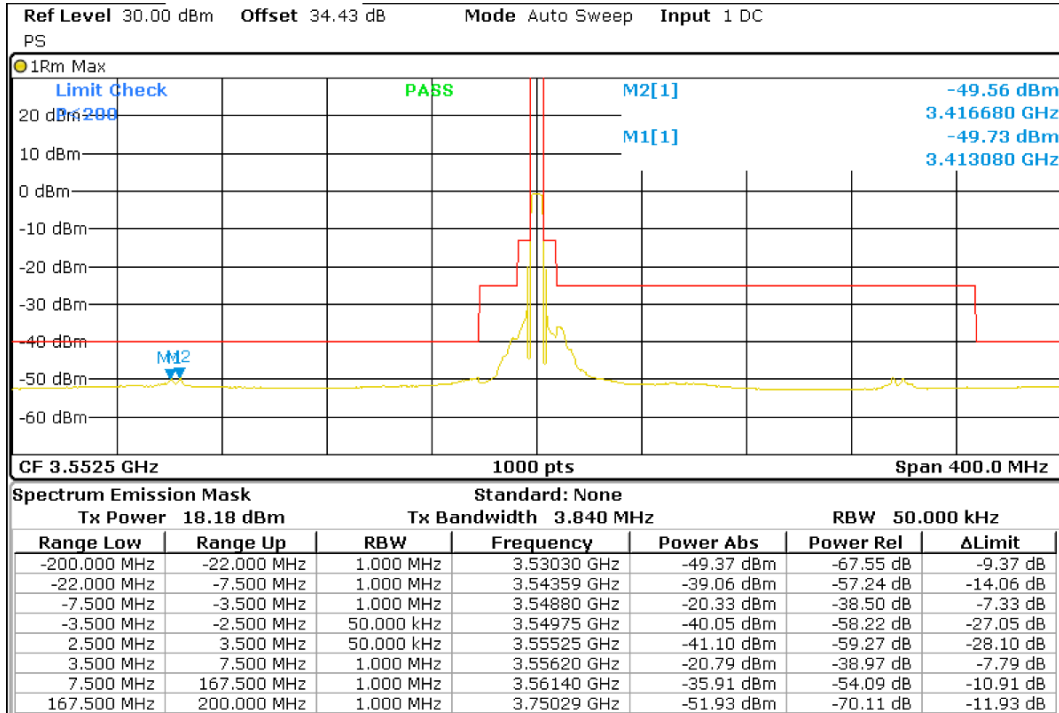
Verdict: PASS

(See next plots)

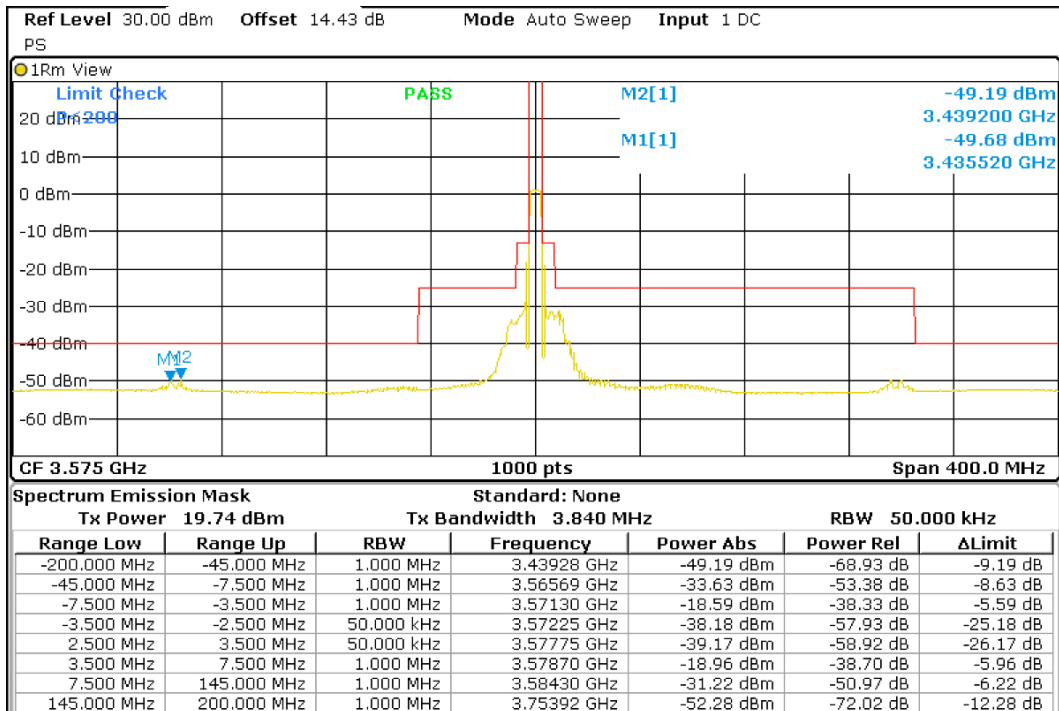
TEST RESULTS (Cont.):

5 MHz BW

Lowest Channel (3552.5 MHz)

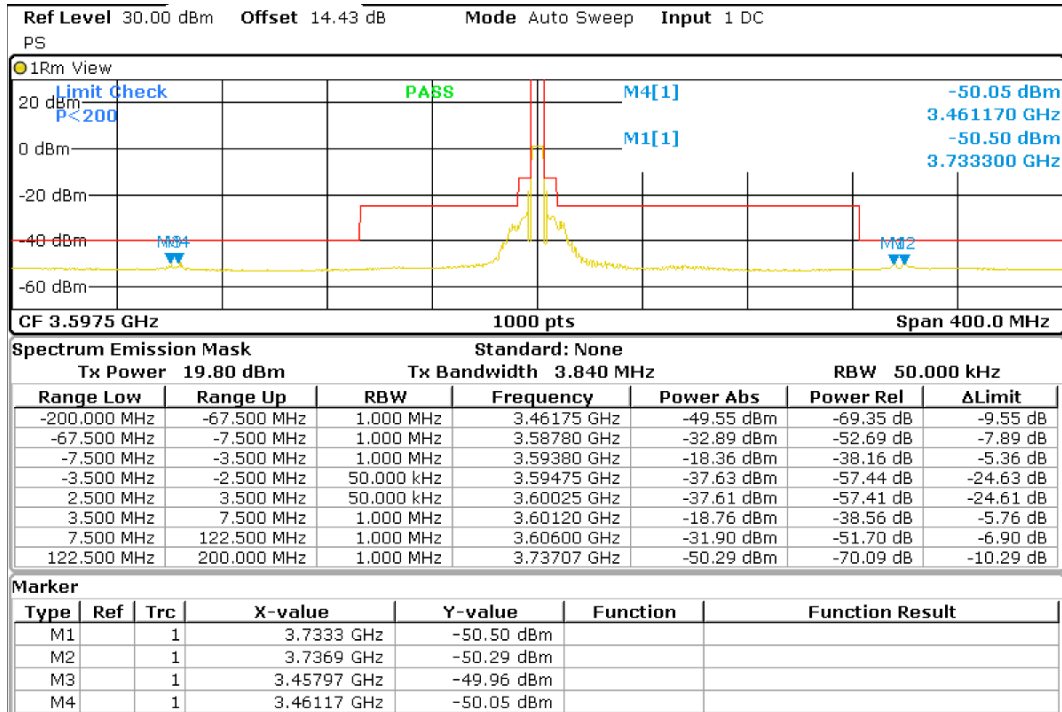


Middle Channel (3575 MHz)



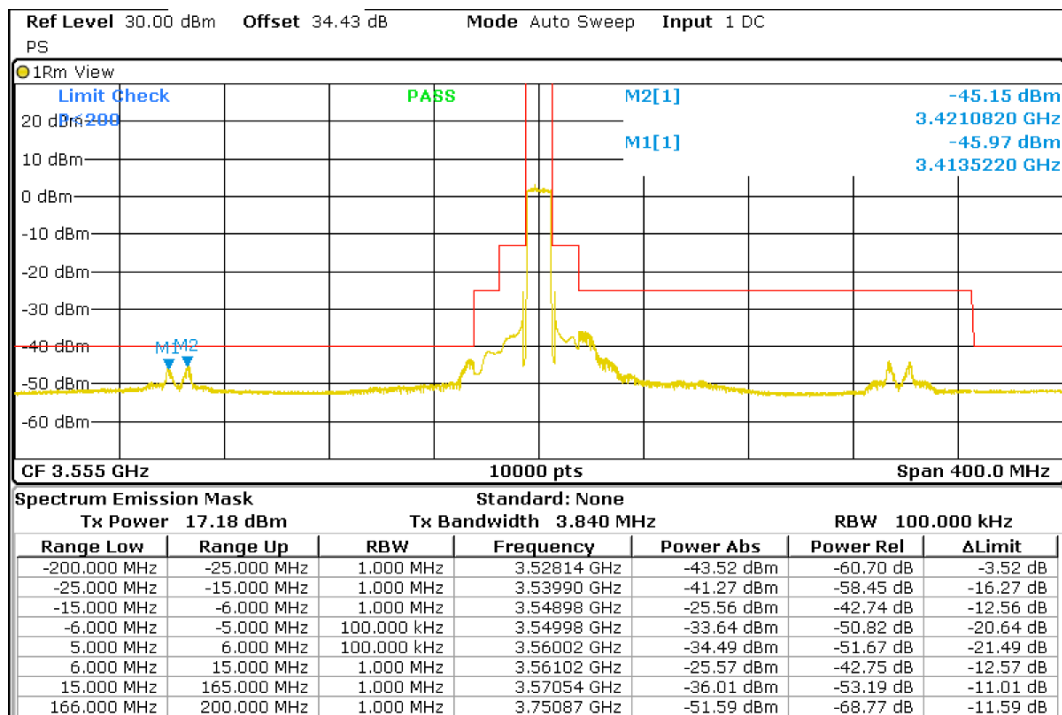
TEST RESULTS (Cont.):

Highest Channel (3597.5 MHz)



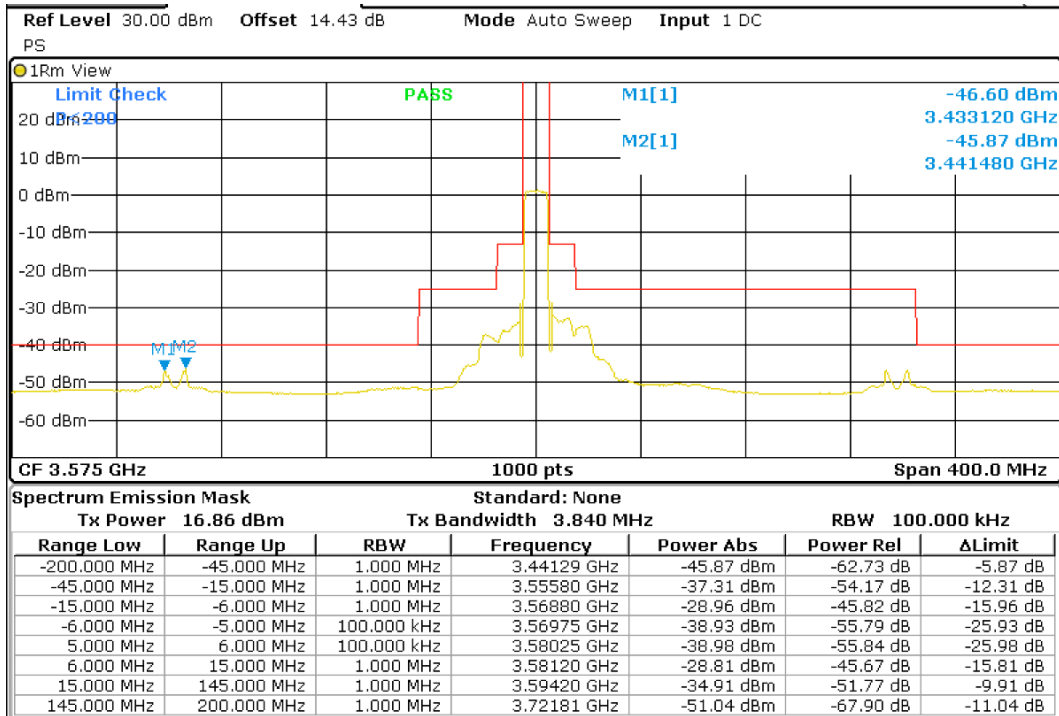
10 MHz BW

Lowest Channel (3555 MHz)

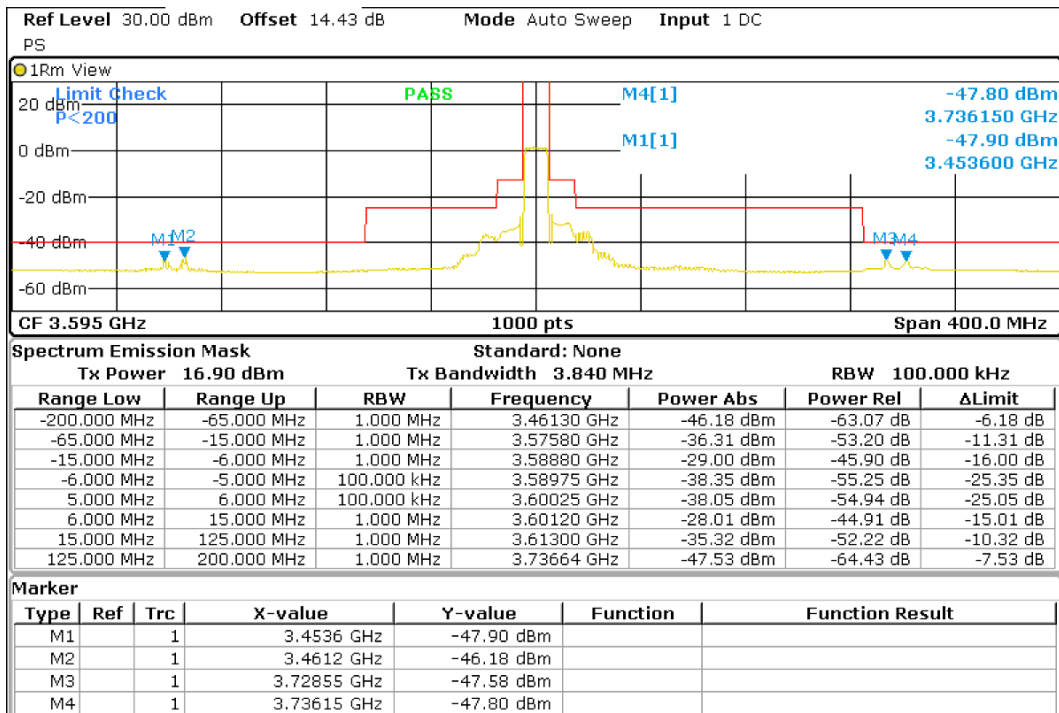


TEST RESULTS (Cont.):

Middle Channel (3575 MHz)



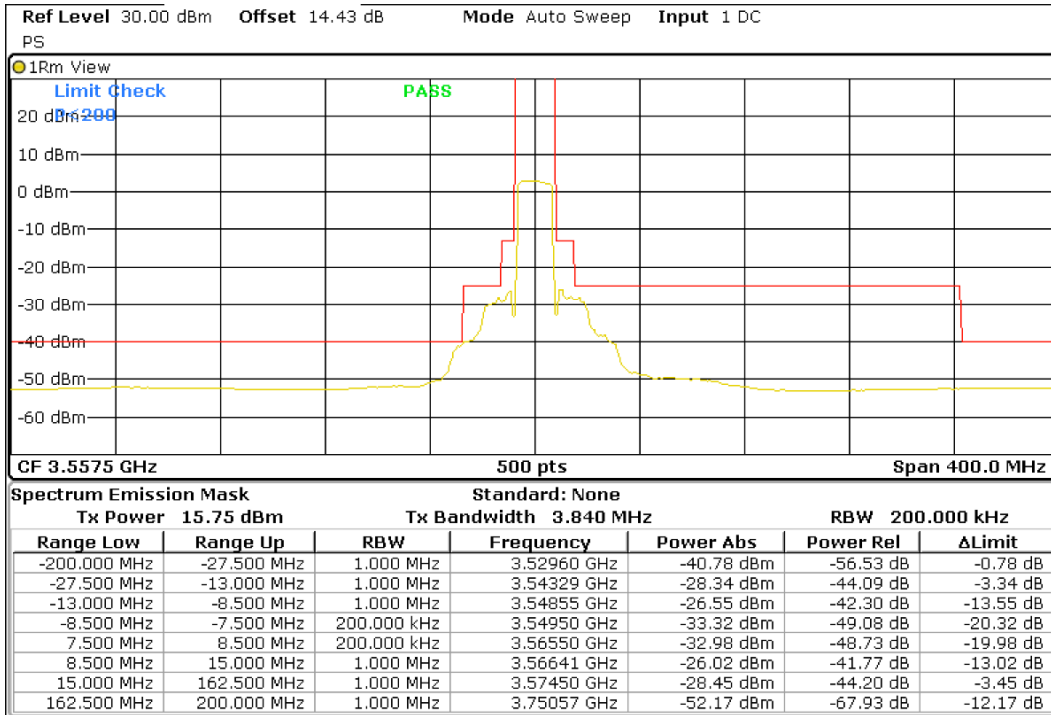
Highest Channel (3595 MHz)



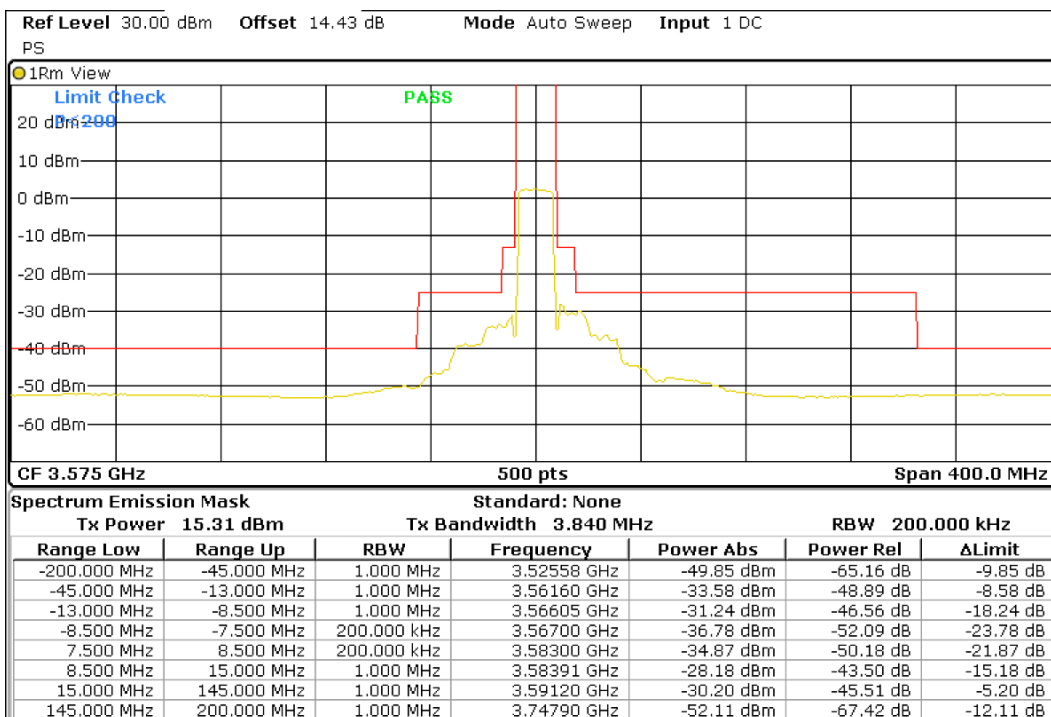
TEST RESULTS (Cont.):

15 MHz BW

Lowest Channel (3557.5 MHz)

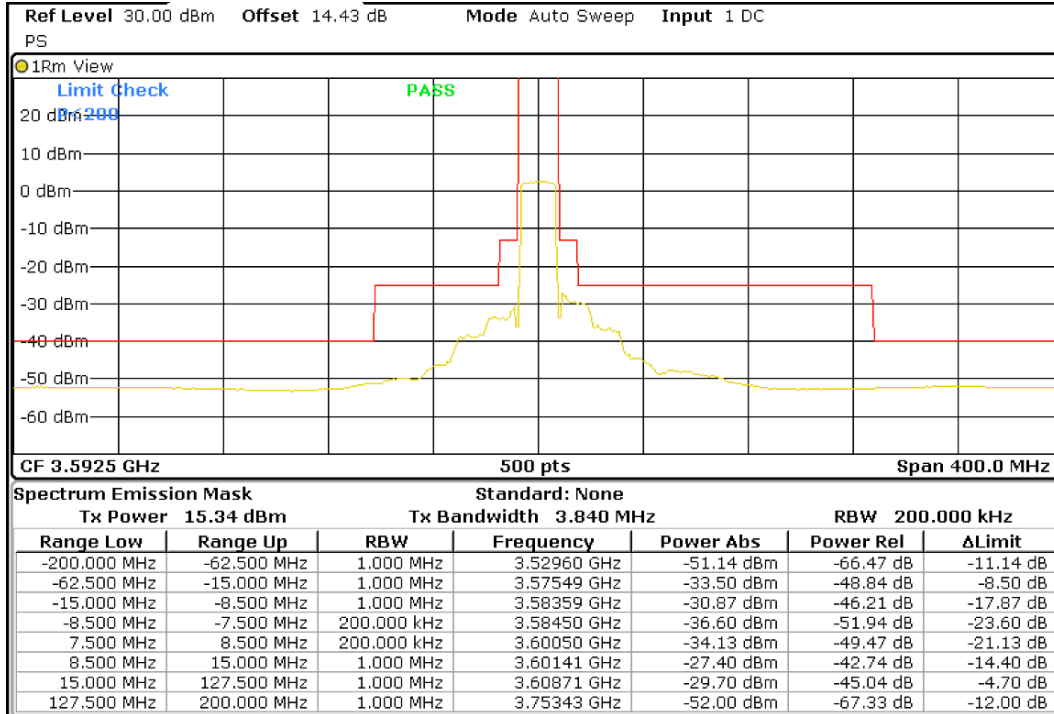


Middle Channel (3575 MHz)



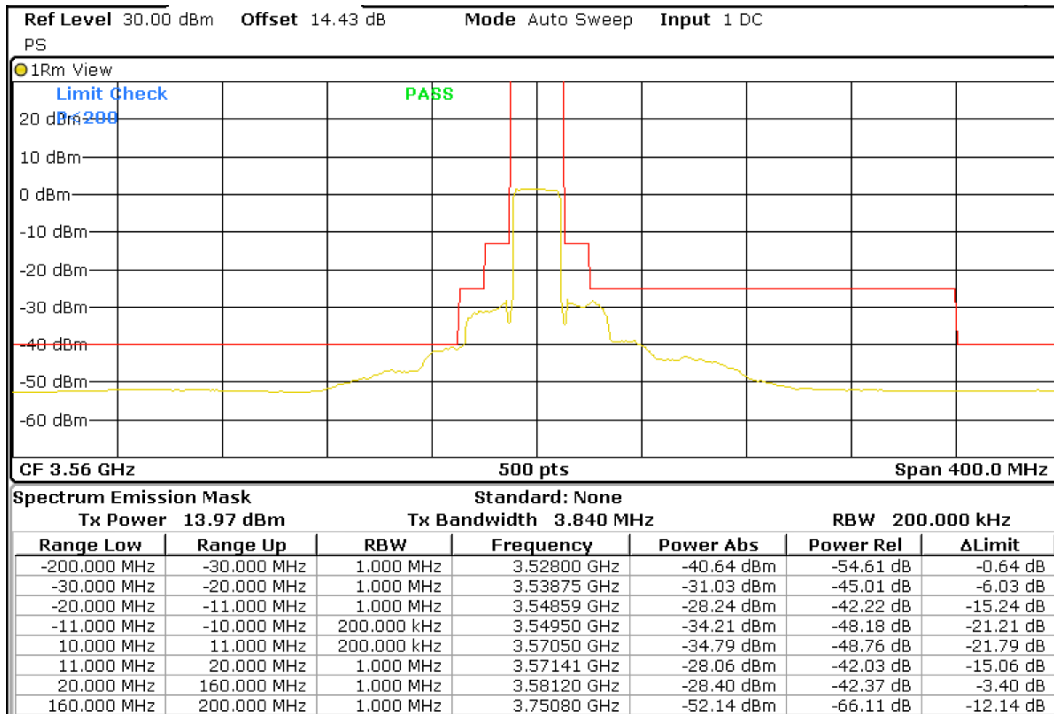
TEST RESULTS (Cont.):

Highest Channel (3592.5 MHz)



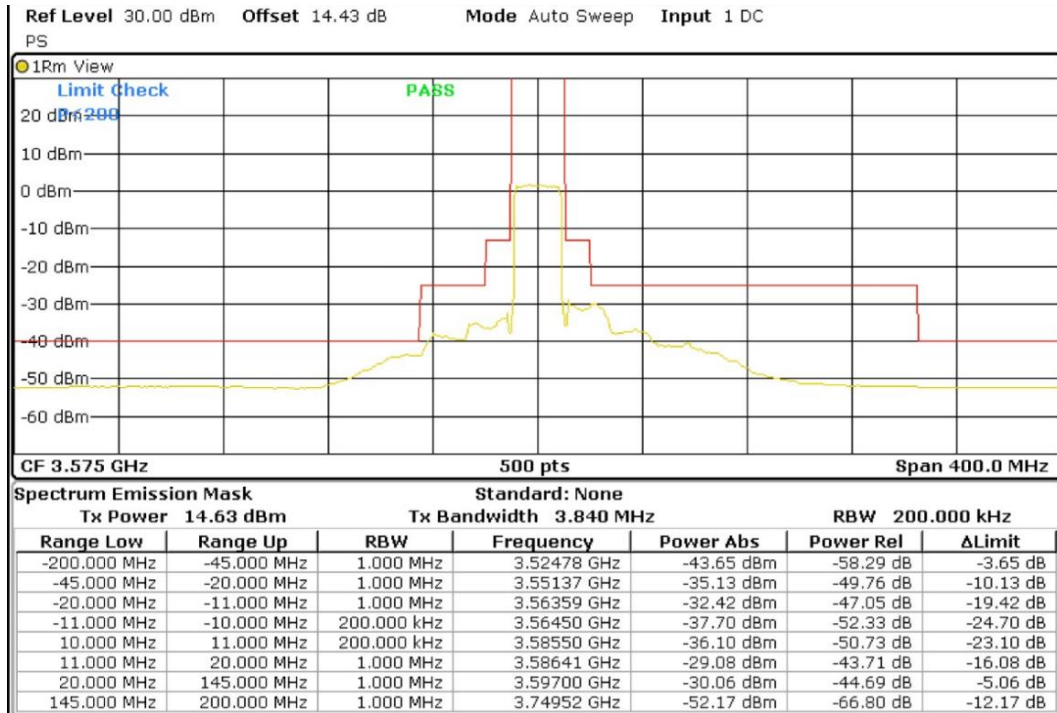
20 MHz BW

Lowest Channel (3560 MHz)

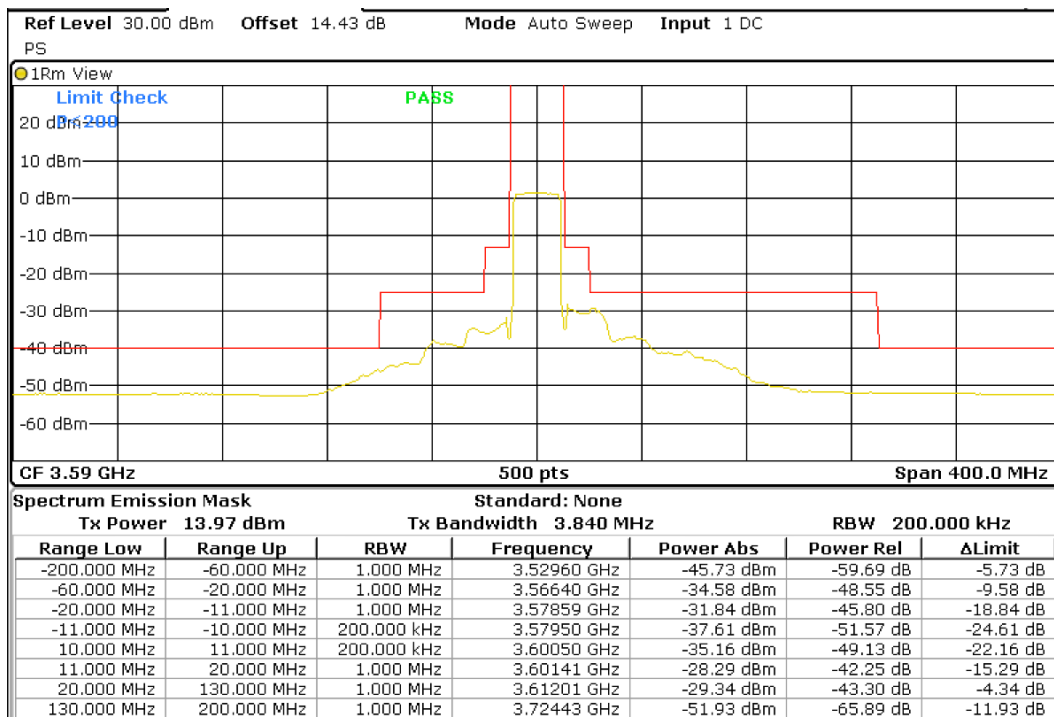


TEST RESULTS (Cont.):

Middle Channel (3575 MHz)



Highest Channel (3590 MHz)



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

Results:

5 MHz BW

Lowest 3602.5 MHz		Middle 3650 MHz		Highest 3697.5 MHz	
Spurious Frequency (MHz)	Emission Level (dBm/MHz)	Spurious Frequency (MHz)	Emission Level (dBm/MHz)	Spurious Frequency (MHz)	Emission Level (dBm/MHz)
3462.68	-50.81	3510.81	-52.07	3832.87	-50.27
3466.28	-50.85	3514.01	-51.61	3837.15	-50.30
3738.23	-50.84	3785.92	-49.90		
		3789.61	-50.20		
Measurement uncertainty (dB)					<± 2.03

10 MHz BW

Lowest 3605 MHz		Middle 3650 MHz		Highest 3695 MHz	
Spurious Frequency (MHz)	Emission Level (dBm/MHz)	Spurious Frequency (MHz)	Emission Level (dBm/MHz)	Spurious Frequency (MHz)	Emission Level (dBm/MHz)
3462.98	-49.02	3508.44	-50.04	3828.46	-44.78
3471.46	-47.85	3516.31	-49.28	3836.54	-45.24
3738.34	-48.41	3783.66	-47.29		
3746.46	-48.58	3791.74	-47.49		
Measurement uncertainty (dB)					<± 2.03

15 MHz BW

No conducted spurious signal was detected for the lowest, middle and highest operating channels.

20 MHz BW

No conducted spurious signal was detected for the lowest, middle and highest operating channels.

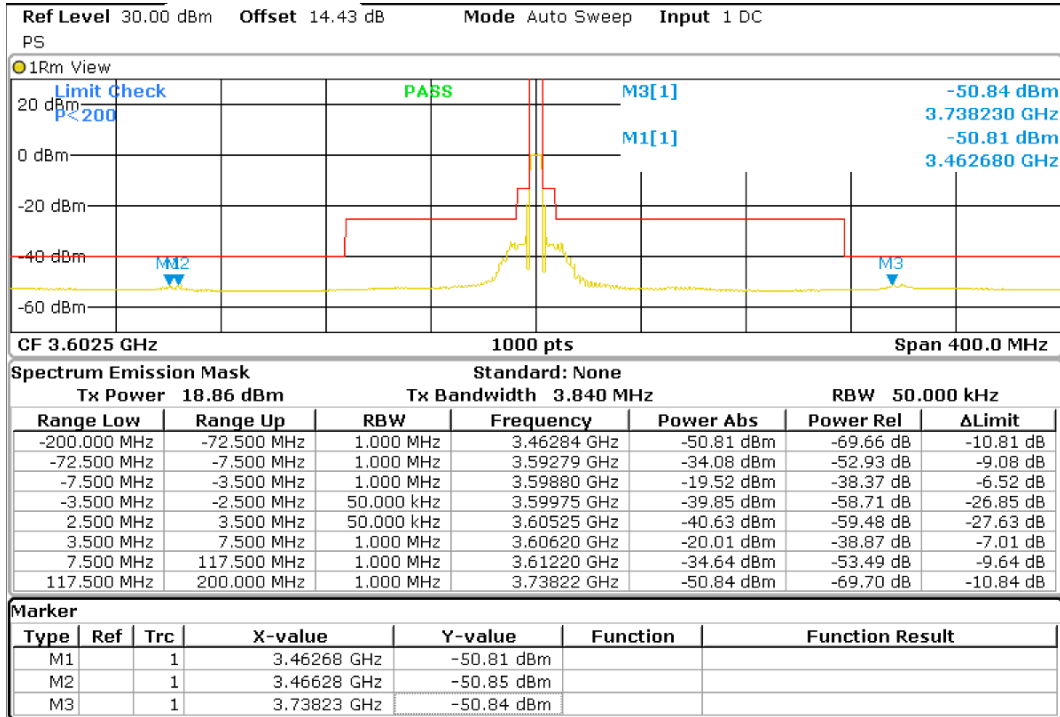
Verdict: PASS

(See next plots)

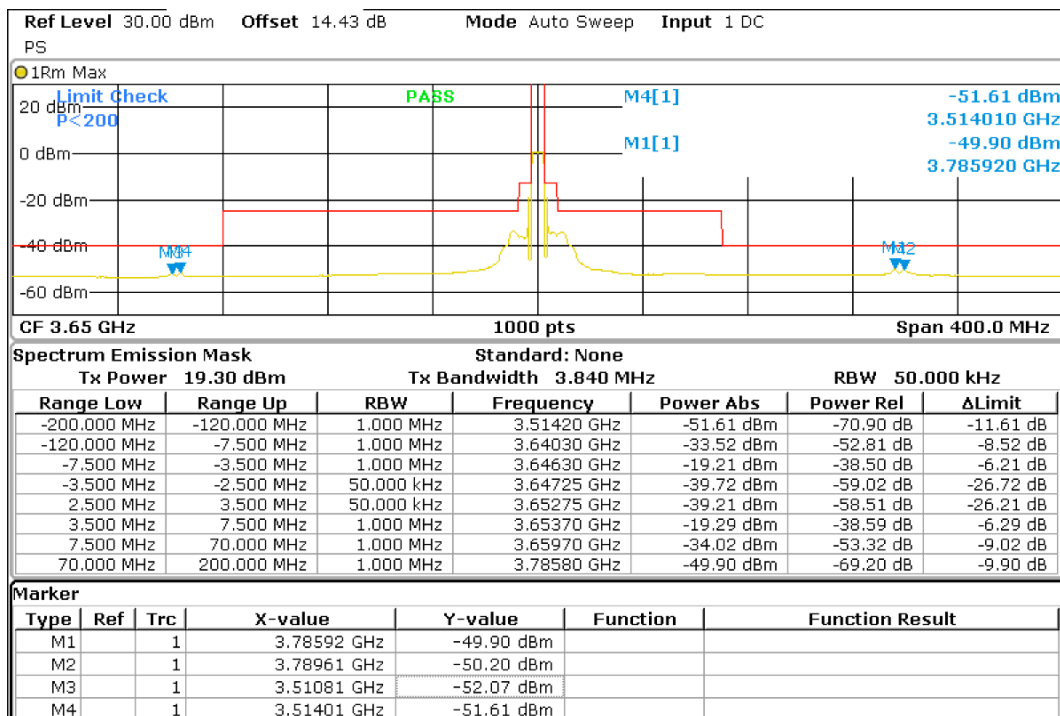
TEST RESULTS (Cont.):

5 MHz BW

Lowest Channel (3602.5 MHz)

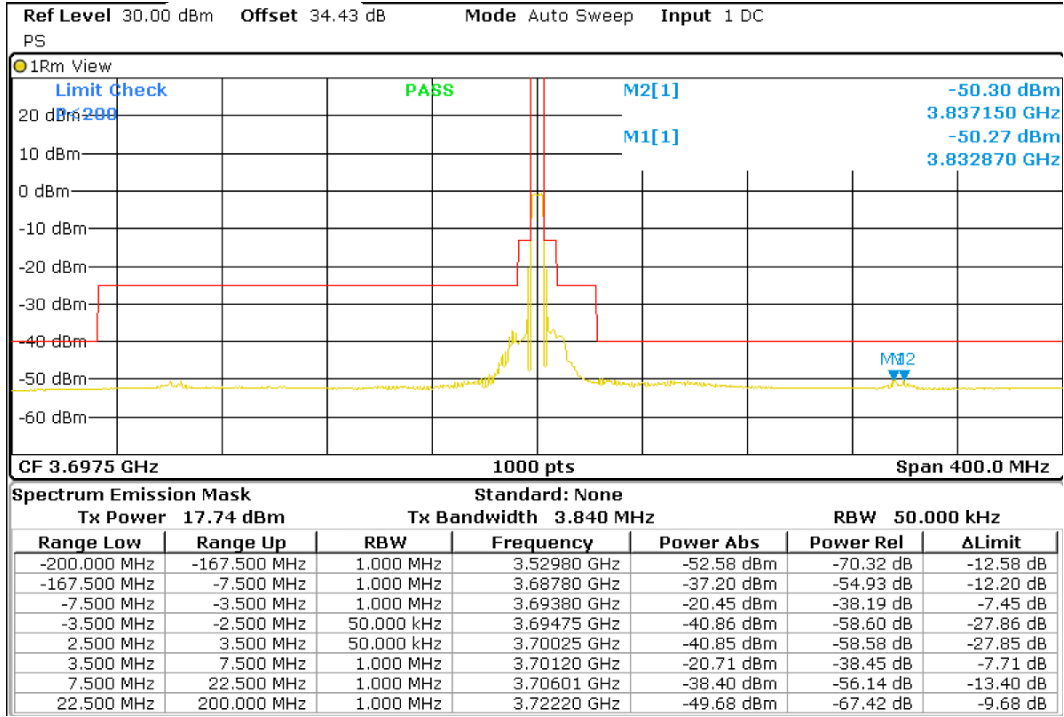


Middle Channel (3650 MHz)



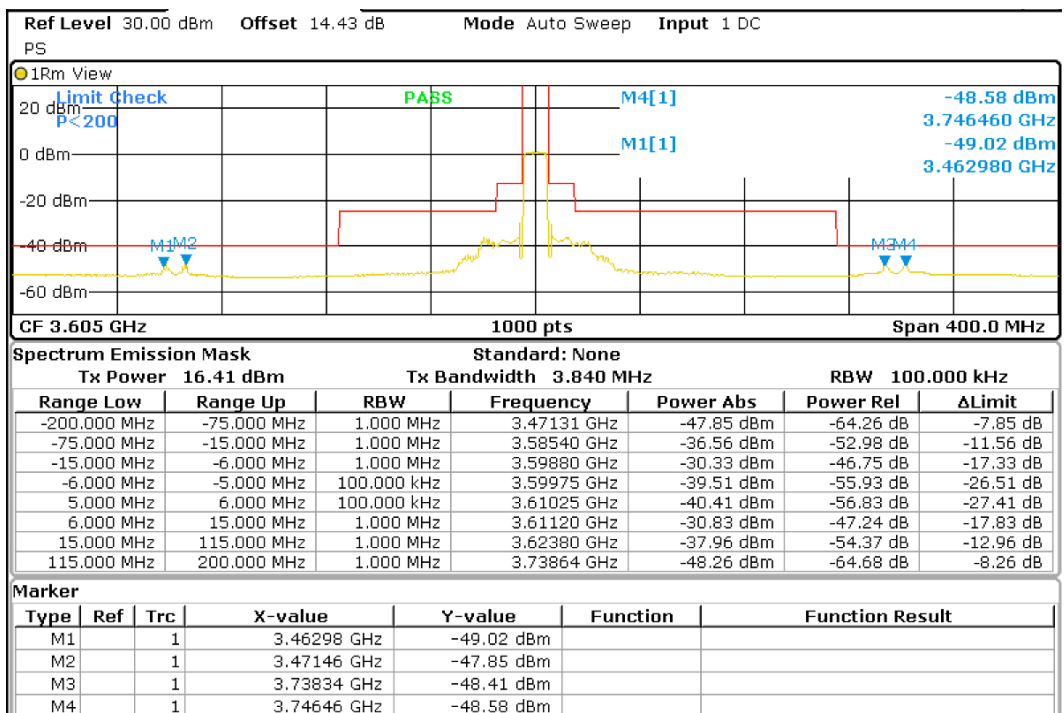
TEST RESULTS (Cont.):

Highest Channel (3697.5 MHz)



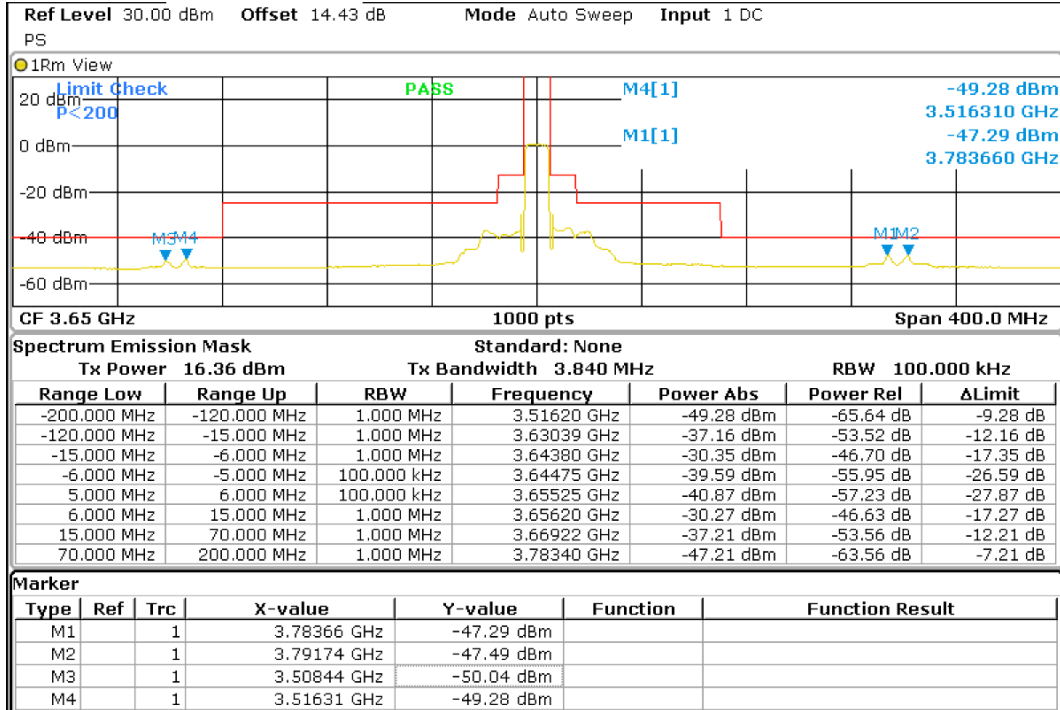
10 MHz BW

Lowest Channel (3605 MHz)

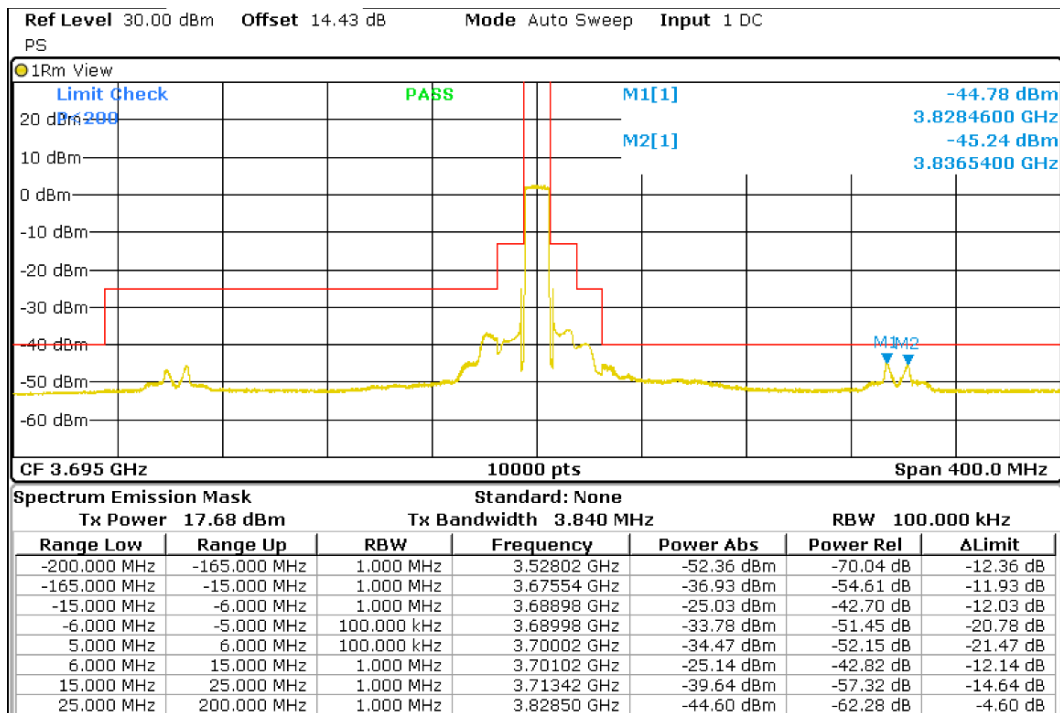


TEST RESULTS (Cont.):

Middle Channel (3650 MHz)



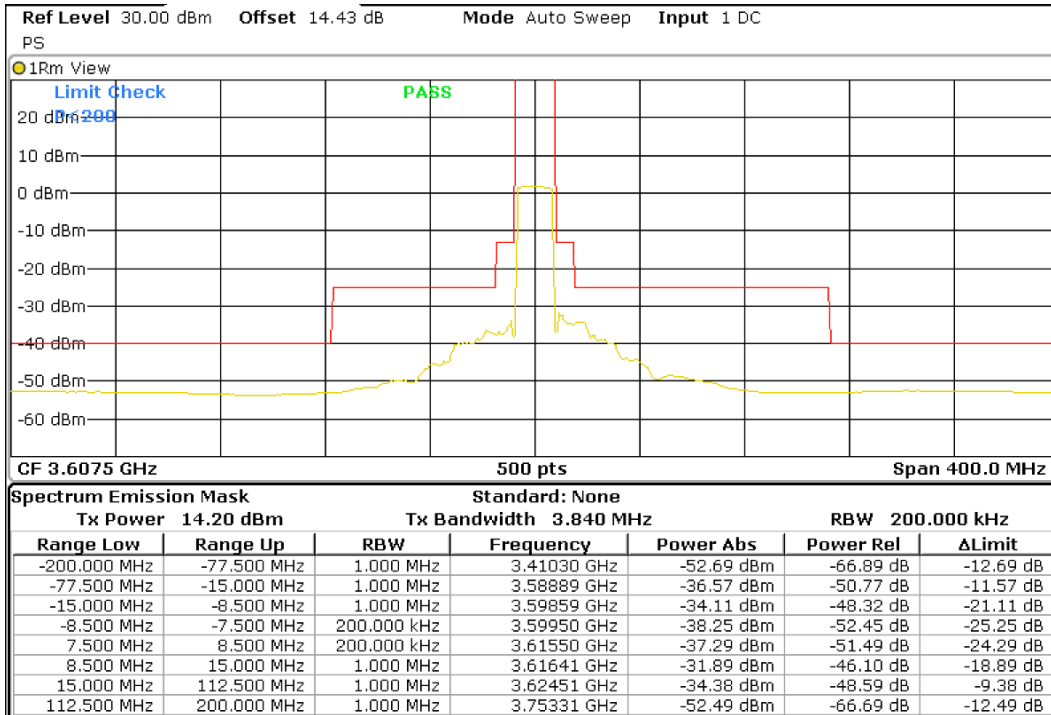
Highest Channel (3695 MHz)



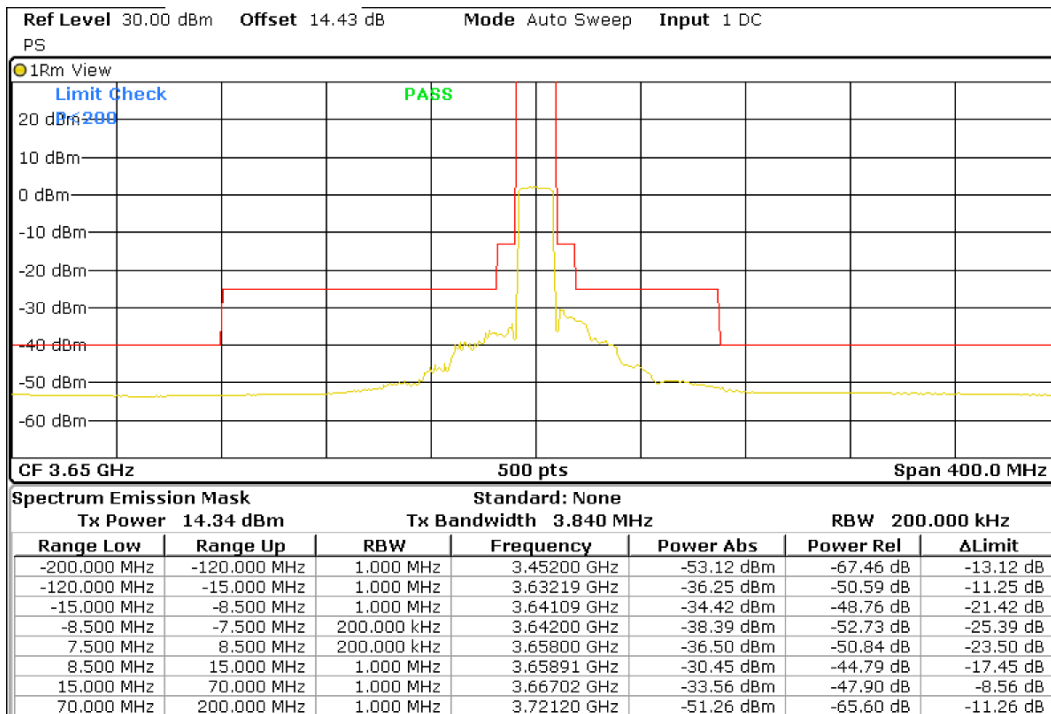
TEST RESULTS (Cont.):

15 MHz BW

Lowest Channel (3607.5 MHz)

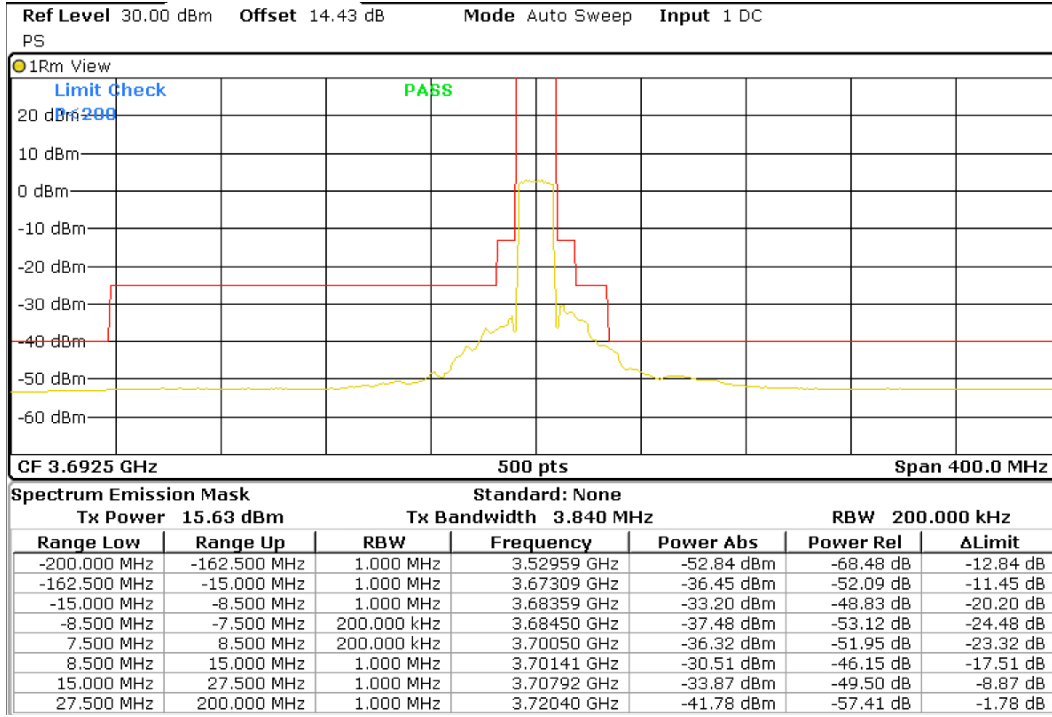


Middle Channel (3650 MHz)



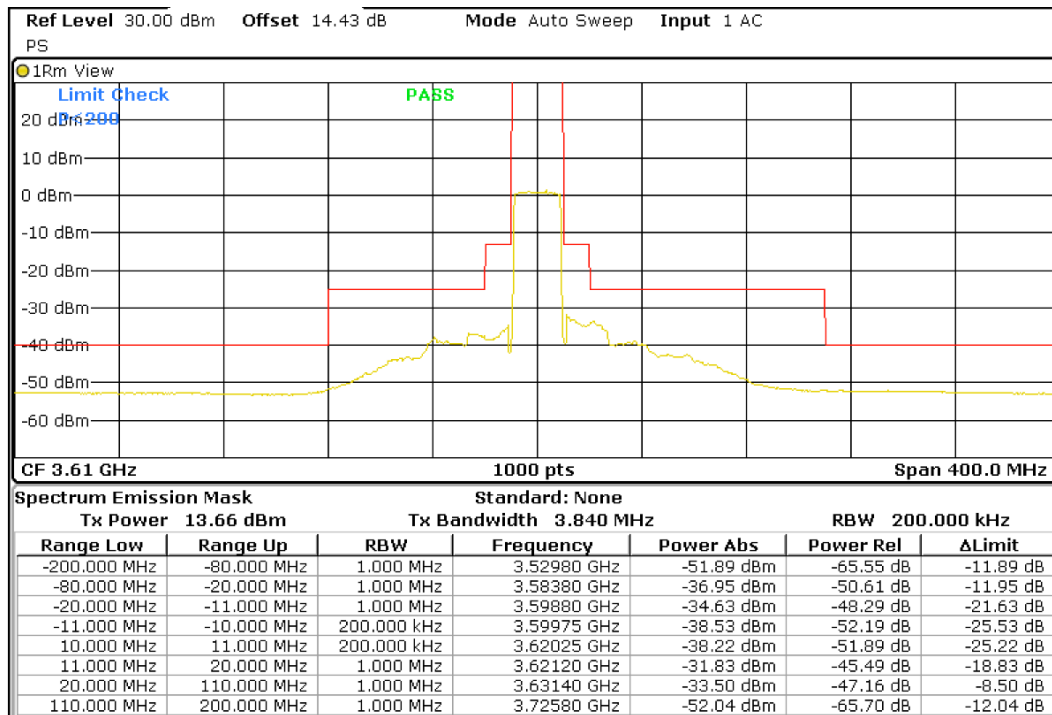
TEST RESULTS (Cont.):

Highest Channel (3692.5 MHz)



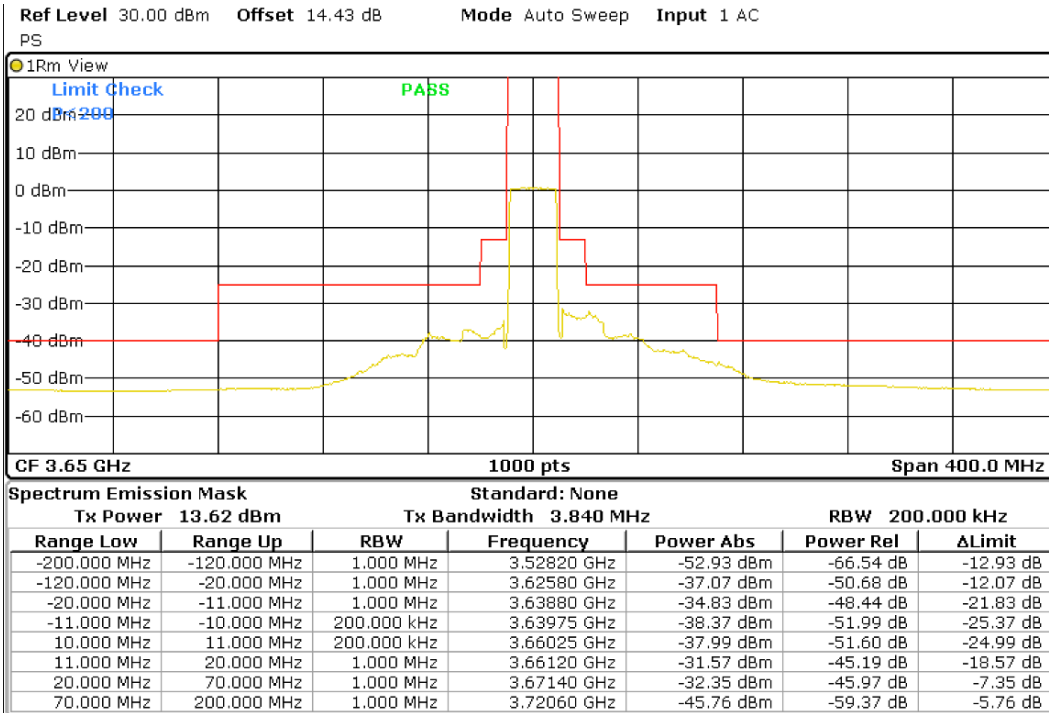
20 MHz BW

Lowest Channel (3610 MHz)

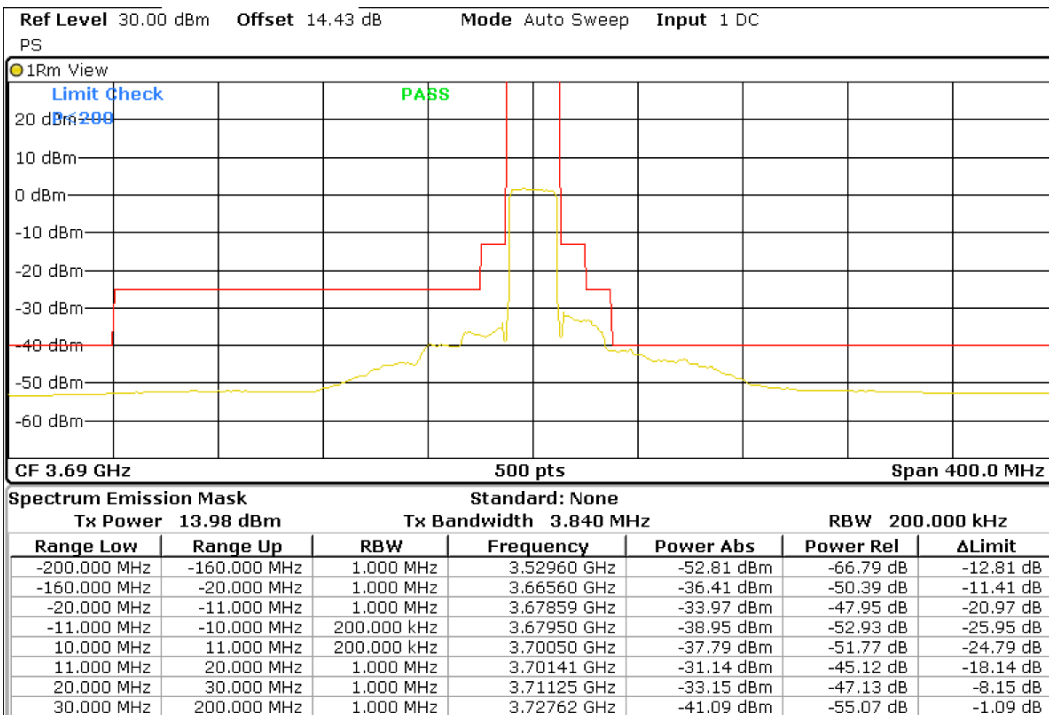


TEST RESULTS (Cont.):

Middle Channel (3650 MHz)



Highest Channel (3690 MHz)



TEST A.7: SPURIOUS EMISSIONS AT ANTENNA TERMINALS

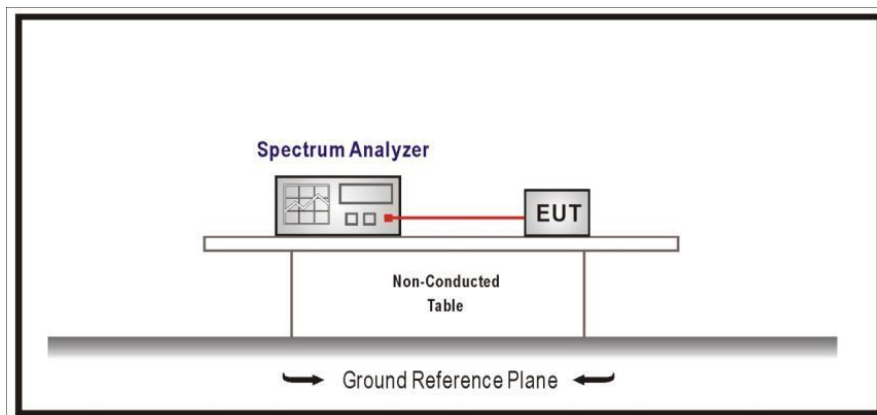
LIMITS:	Product standard:	Part 2.1051 and 96.41 Subclause (e)
	Test standard:	ANSI C63.26-2015

LIMITS

The radio frequency voltage or powers generated within the equipment and appearing on a spurious frequency shall be checked at the equipment output terminals when properly loaded with a suitable artificial antenna. Curves or equivalent data shall show the magnitude of each harmonic and other spurious emission that can be detected when the equipment is operated under the conditions specified in § 2.1049 as appropriate. The magnitude of spurious emissions which are attenuated more than 20 dB below the permissible value need not be specified.

The limits for emission outside the fundamental for any emission below 3530 MHz and above 3720 MHz are -40 dBm/MHz.

TEST SETUP



The following duty cycle correction was added in RF level offset to get the accurate measured emission level in the average power measurement.

The duty cycle correction = $10 \log (1/0.63) = 2.02 \text{ (dB)}$

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

Results:

5 MHz BW

Lowest 3552.5 MHz		Middle 3625 MHz		Highest 3697.5 MHz	
Spurious Frequency (MHz)	Emission Level (dBm/MHz)	Spurious Frequency (MHz)	Emission Level (dBm/MHz)	Spurious Frequency (MHz)	Emission Level (dBm/MHz)
3413.22	-45.66	3489.16	-46.04	3837.00	-46.12
7106.18	-55.36	3760.72	-45.44	7395.18	-55.40
		7249.68	-52.83		
Measurement uncertainty (dB)					<± 2.03

10 MHz BW

Lowest 3555 MHz		Middle 3625 MHz		Highest 3695 MHz	
Spurious Frequency (MHz)	Emission Level (dBm/MHz)	Spurious Frequency (MHz)	Emission Level (dBm/MHz)	Spurious Frequency (MHz)	Emission Level (dBm/MHz)
3413.53	-43.79	3491.03	-44.19	3828.41	-44.12
3421.31	-43.49	3758.54	-43.45	7392.68	-55.75
7112.18	-55.17	7245.68	-55.29		
Measurement uncertainty (dB)					<± 2.03

15 MHz BW

Lowest 3557.5 MHz		Middle 3625 MHz		Highest 3692.5 MHz	
Spurious Frequency (MHz)	Emission Level (dBm/MHz)	Spurious Frequency (MHz)	Emission Level (dBm/MHz)	Spurious Frequency (MHz)	Emission Level (dBm/MHz)
7112.18	-59.60	7242.18	-59.23	7380.68	-58.68
Measurement uncertainty (dB)					<± 2.03

20 MHz BW

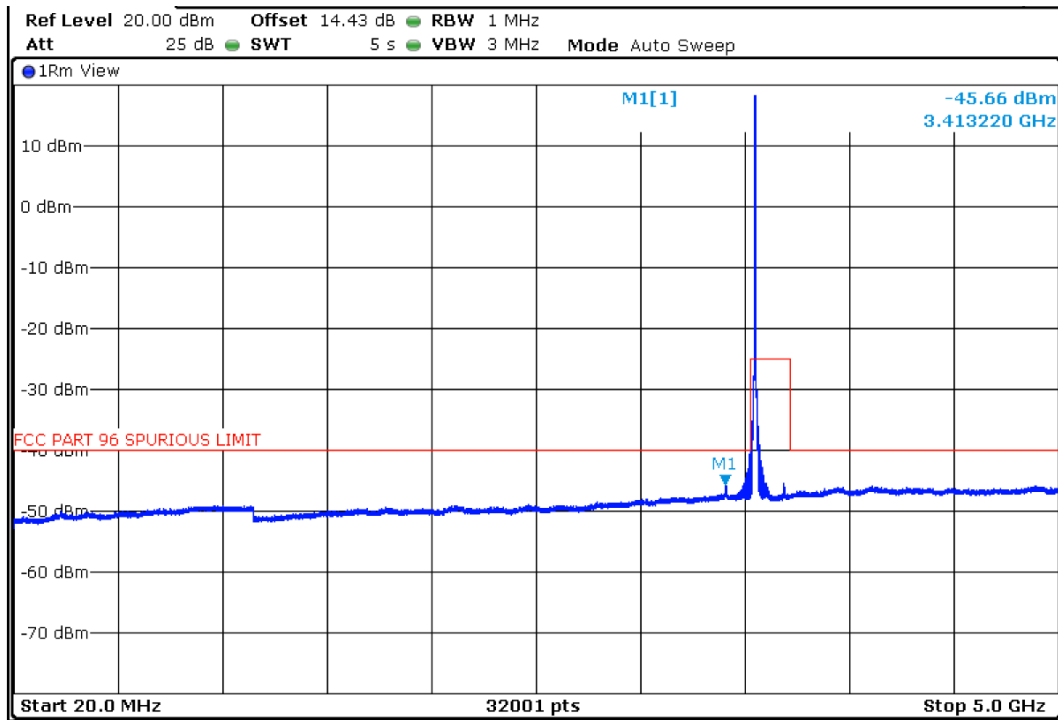
Lowest 3560 MHz		Middle 3625 MHz		Highest 3690 MHz	
Spurious Frequency (MHz)	Emission Level (dBm/MHz)	Spurious Frequency (MHz)	Emission Level (dBm/MHz)	Spurious Frequency (MHz)	Emission Level (dBm/MHz)
3292.61	-58.52	7249.18	-60.11	3420.59	-58.29
3827.96	-56.66			3971.88	-58.44
7112.18	-60.43			7388.68	-59.99
Measurement uncertainty (dB)					<± 2.03

TEST RESULTS (Cont.):	
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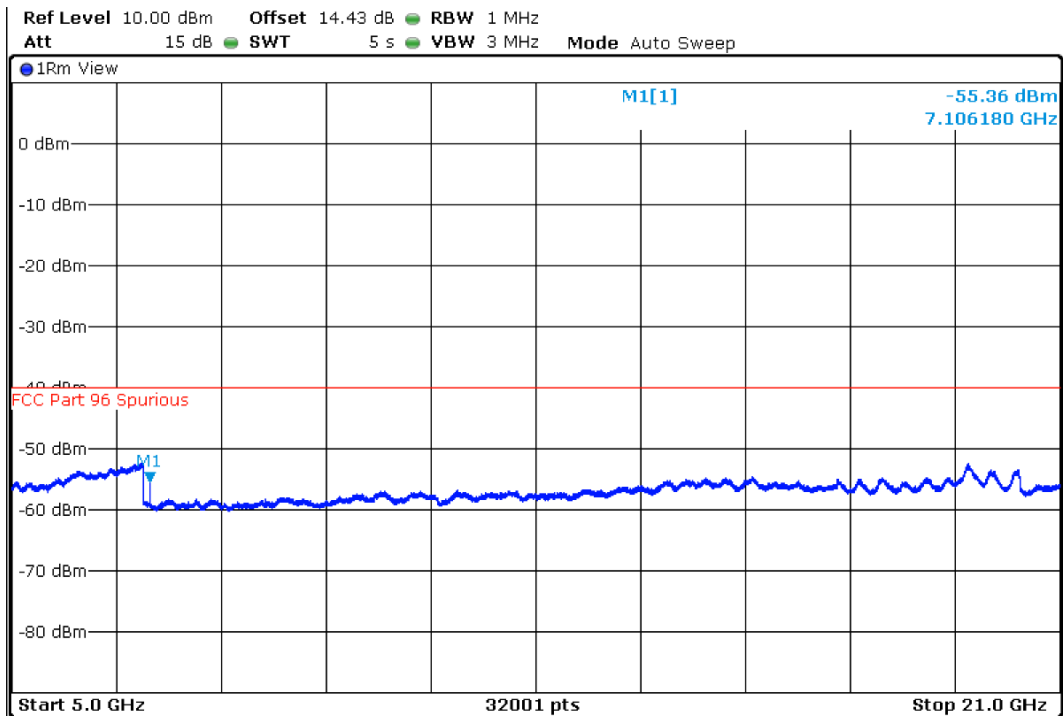
5 MHz BW

Lowest Channel (3552.5 MHz)

FREQUENCY RANGE 20 MHz-5 GHz

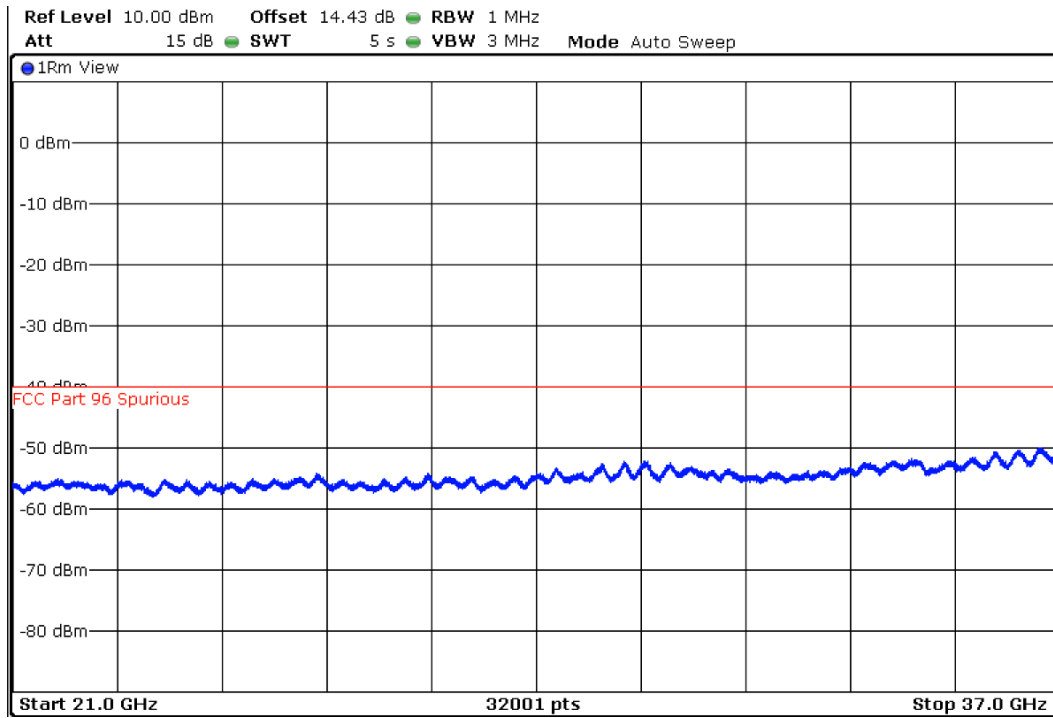


FREQUENCY RANGE 5-21 GHz



TEST RESULTS (Cont.):

FREQUENCY RANGE 21-37 GHz



Middle Channel (3625 MHz)

FREQUENCY RANGE 20 MHz-5 GHz

