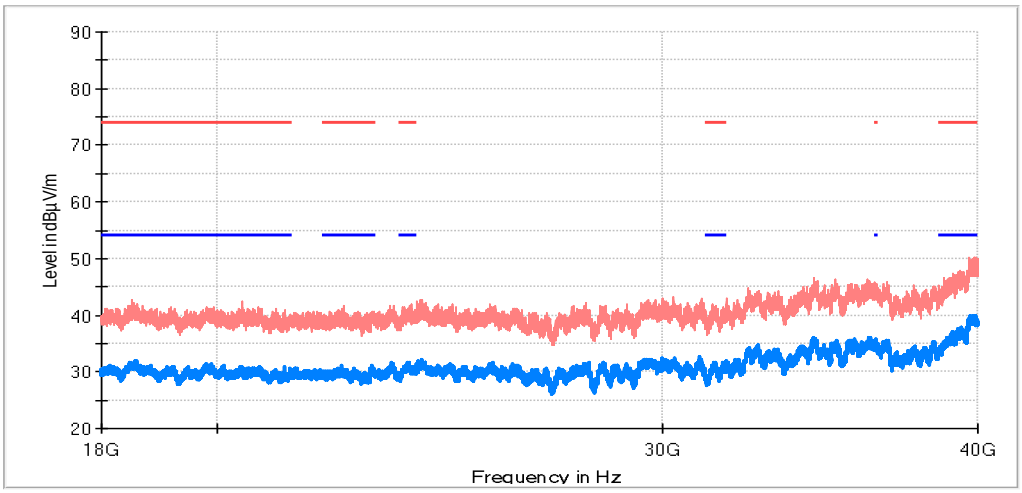
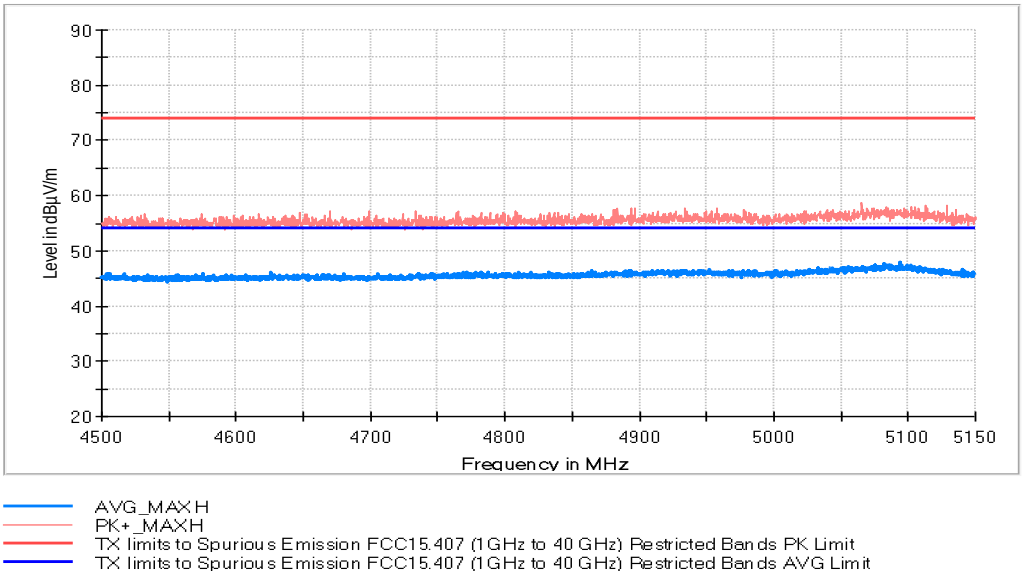
TEST RESULTS (Cont.)	

High Channel

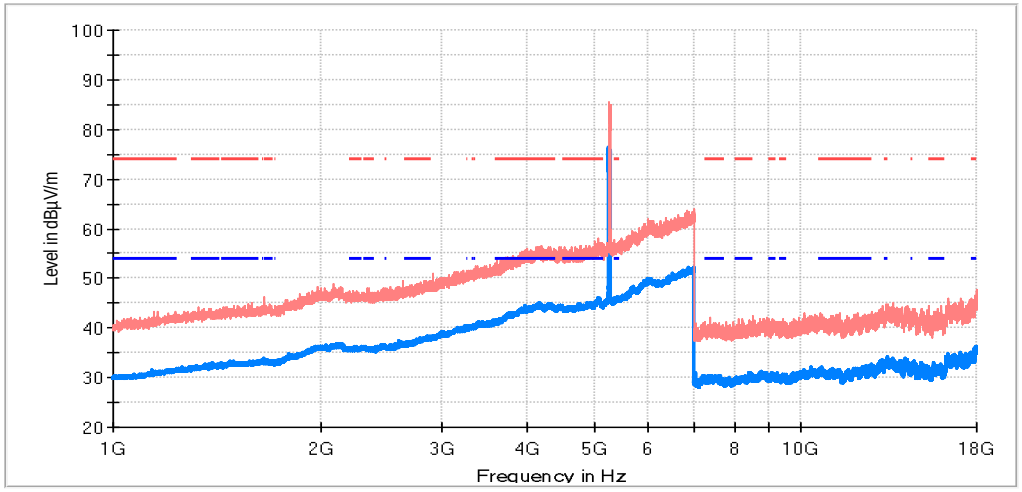


RESTRICTED BANDS	4.5 GHz – 5.15 GHz

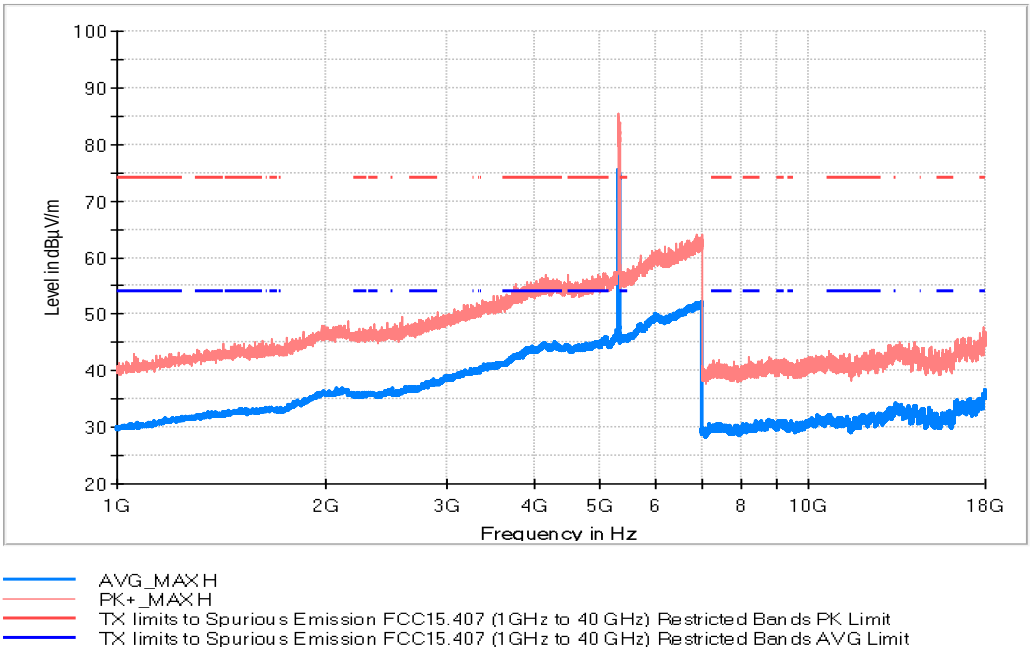


TEST RESULTS (Cont.)	ac mode (40 MHz)
FREQUENCY RANGE	1 GHz – 18 GHz

Low Channel

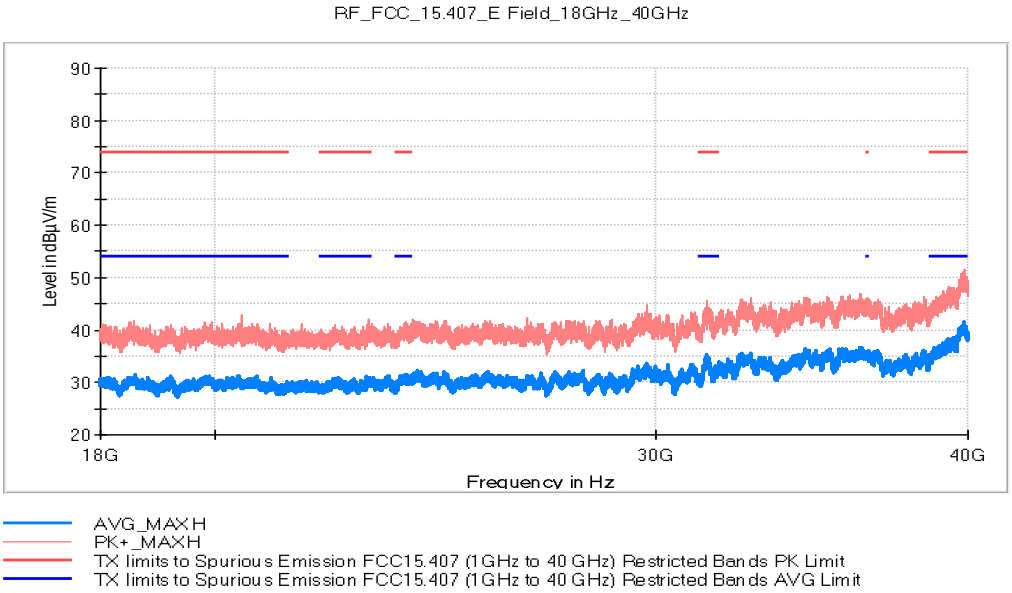


High Channel



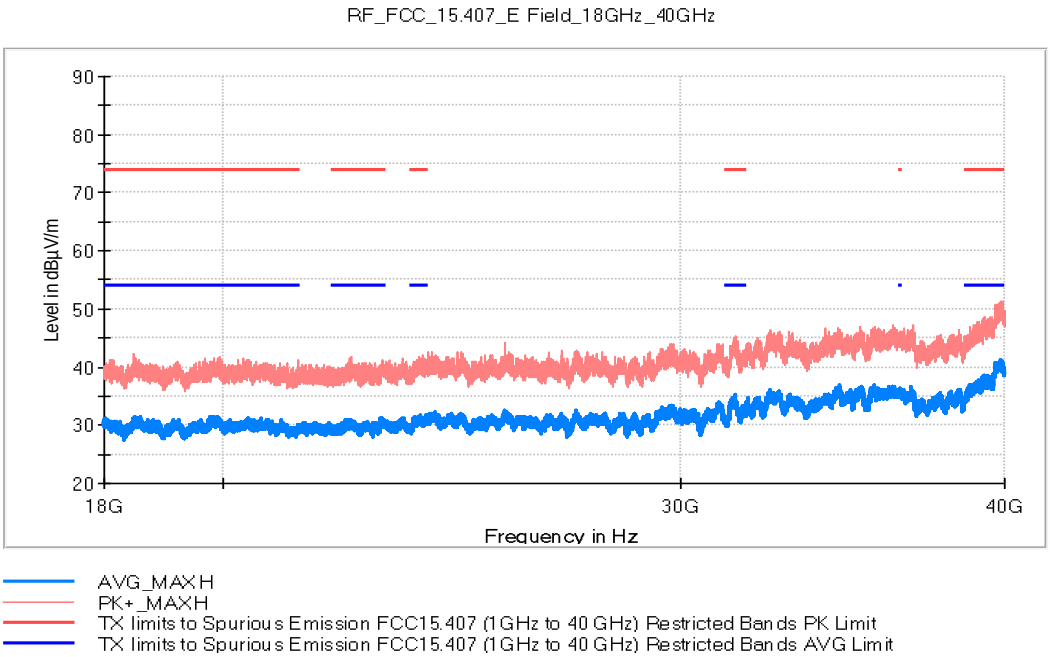
TEST RESULTS (Cont.)	
FREQUENCY RANGE	**18 GHz – 40 GHz**

Low Channel

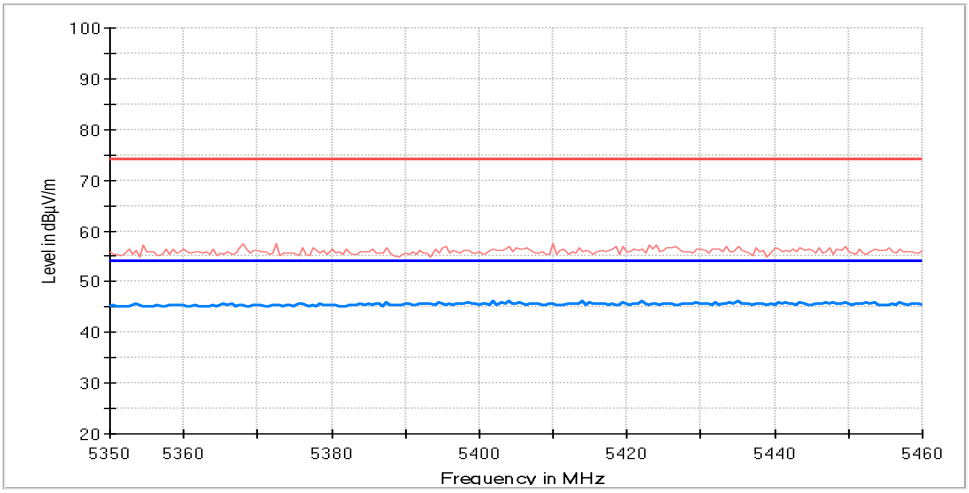


.

High Channel

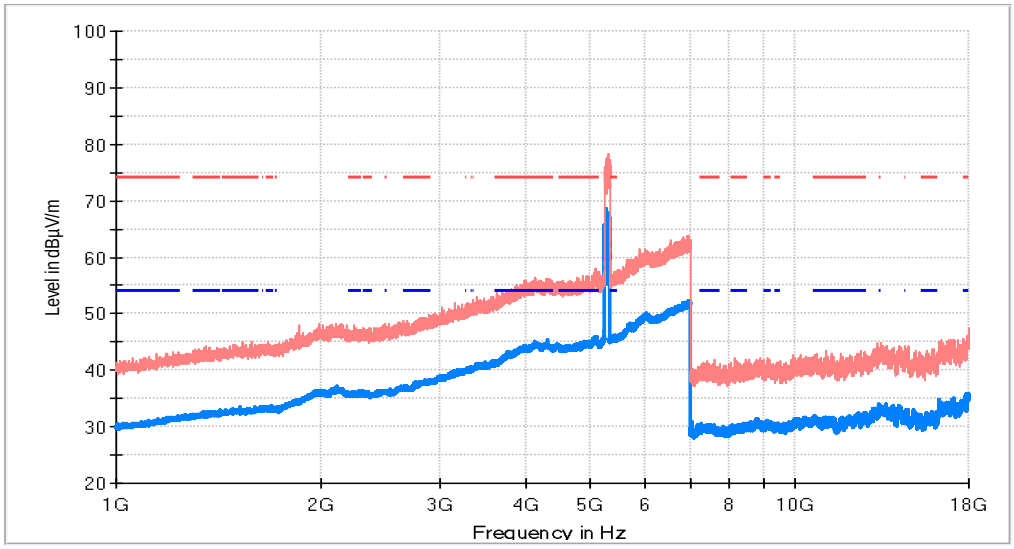


RESTRICTED BANDS	5.35 GHz – 5.46 GHz



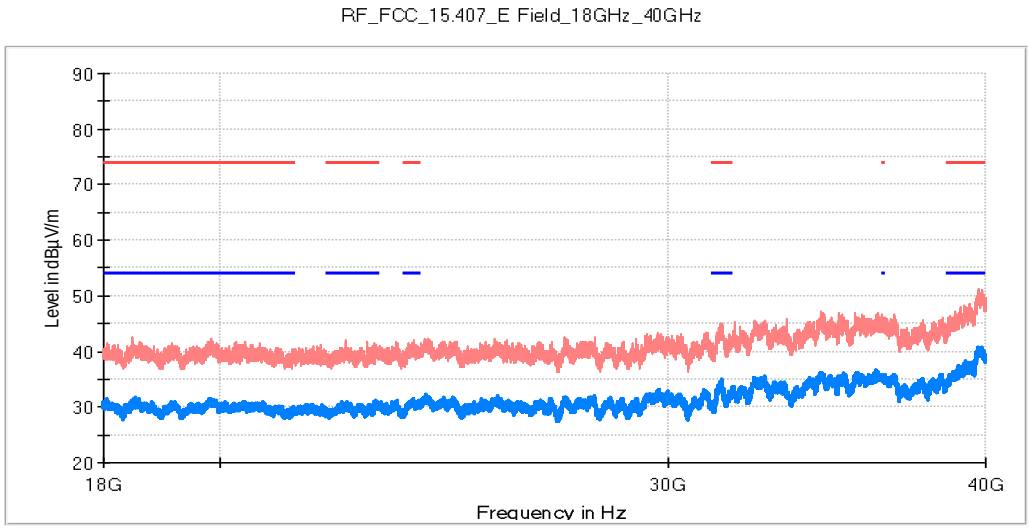
TEST RESULTS (Cont.)	ac mode (80 MHz)
FREQUENCY RANGE	1 GHz – 18 GHz

Mid Channel

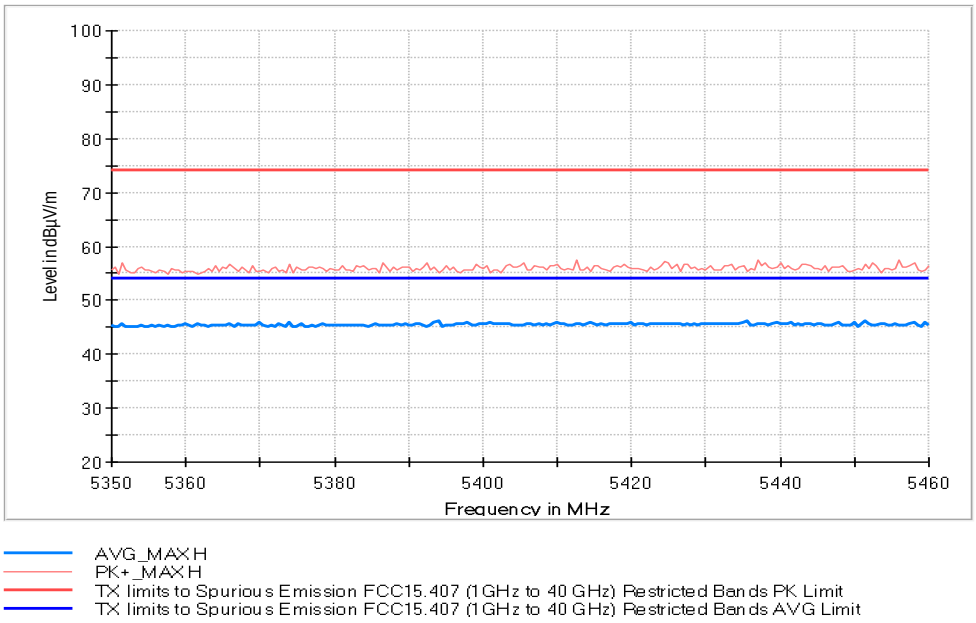


TEST RESULTS (Cont.)	
FREQUENCY RANGE	**18 GHz – 40 GHz**

Mid Channel



RESTRICTED BANDS	5.35 GHz – 5.46 GHz



Appendix D: Test results
5.47 GHz – 5.725 GHz Band

Appendix D Content

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TEST D.7: UNDESIRABLE RADIATED EMISSIONS (TRANSMITTER) 259

DESCRIPTION OF TEST CONDITIONS

TEST CONDITIONS (1)	DESCRIPTION
TC#01 **(a mode)**	Power supply (V): $V_{nominal}$ = 3.8 Vdc Test Frequencies for Conducted/Radiated tests **(20 MHz)**: Lowest channel: 5500 MHz Middle channel: 5600 MHz Highest channel: 5700 MHz
TC#02 **(n mode)**	Power supply (V): $V_{nominal}$ = 3.8 Vdc Test Frequencies for Conducted/Radiated tests **(20 MHz)**: Lowest channel: 5500 MHz Middle channel: 5600 MHz Highest channel: 5700 MHz Test Frequencies for Conducted/Radiated tests **(40 MHz)**: Lowest channel: 5510 MHz Middle channel: 5590 MHz Highest channel: 5710 MHz
TC#03 **(ac mode)**	Power supply (V): $V_{nominal}$ = 3.8 Vdc Test Frequencies for Conducted/Radiated tests **(20 MHz)**: Lowest channel: 5500 MHz Middle channel: 5600 MHz Highest channel: 5700 MHz Test Frequencies for Conducted/Radiated tests **(40 MHz)**: Lowest channel: 5510 MHz Middle channel: 5590 MHz Highest channel: 5710 MHz Test Frequencies for Radiated tests: **(80 MHz)** Lowest channel: 5530 MHz Middle channel: 5610 MHz Highest channel: 5690 MHz

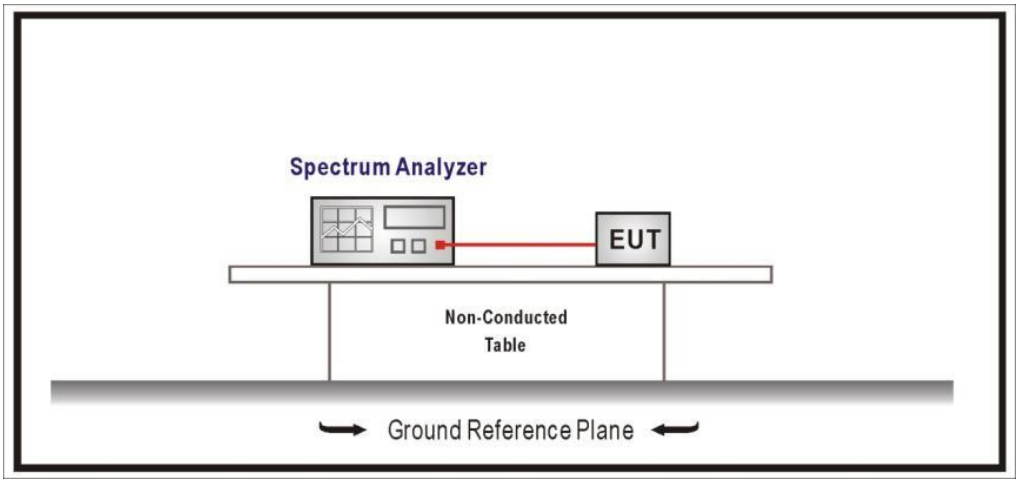
Note (1): For spurious emissions for OFDM modes 802.11a, 802.11n20/40 and 802.11ac20/40/80 a preliminary scan was performed to determine the worst case.
The data rates of 6Mb/s for 802.11a, HT0 (SISO) for 802.11n20/ac20 and n40/ac40, and VHT0 (SISO) for 802.11 ac80 were selected based on preliminary testing that identified those rates corresponding to the worst cases.

TEST D.1: 26DB EMISSION BANDWIDTH AND OCCUPIED BANDWIDTH

LIMITS:	Product standard:	Part 15 Subpart C §15.403 and RSS-247
	Test standard:	Part 15 Subpart C §15.403 and RSS-247 6.2.1

No requirements requested

TEST SETUP:	



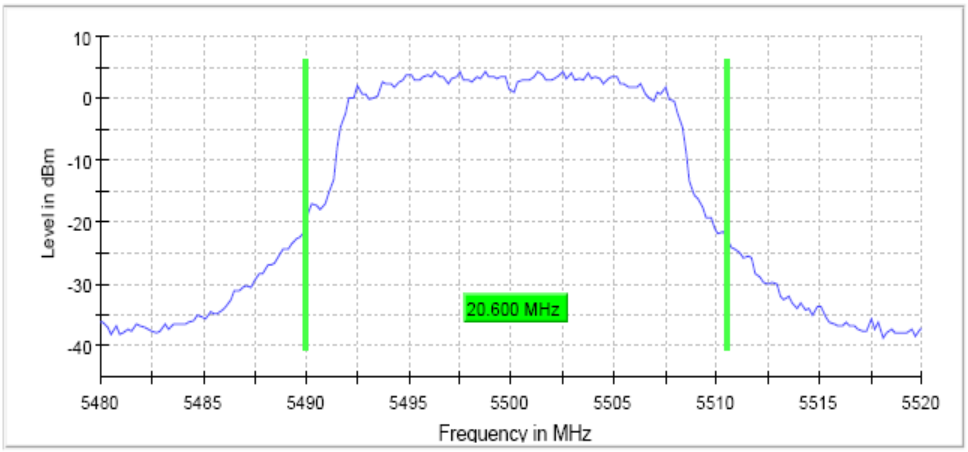
TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#01 **(a mode)**
TEST RESULTS:	PASS

Bandwidth: 20 MHz

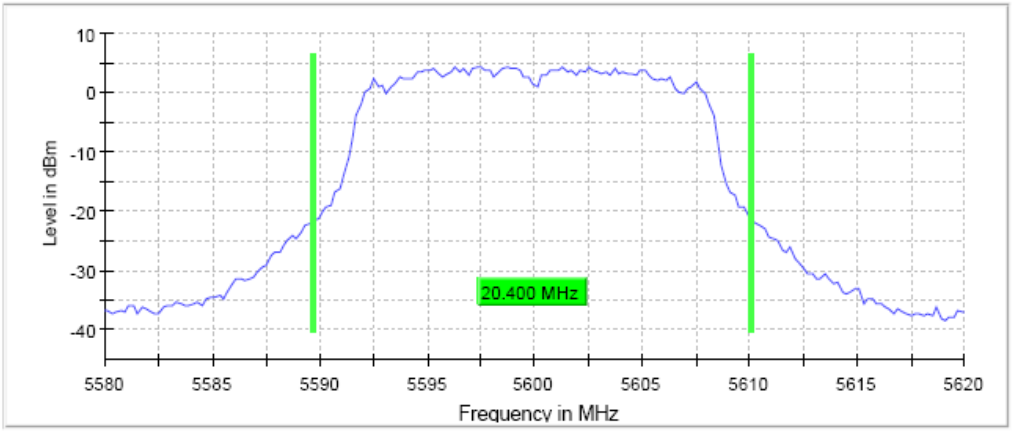
	Lowest frequency 5500 MHz	Middle frequency 5600 MHz	Highest frequency 5700 MHz
26dB Bandwidth (MHz)	20.6	20.4	21.2
Occupied bandwidth (MHz)	16.4	16.4	16.2
Measurement uncertainty (kHz)	<± 8.33		

TEST RESULTS (Cont.):	26 dB BANDWIDTH

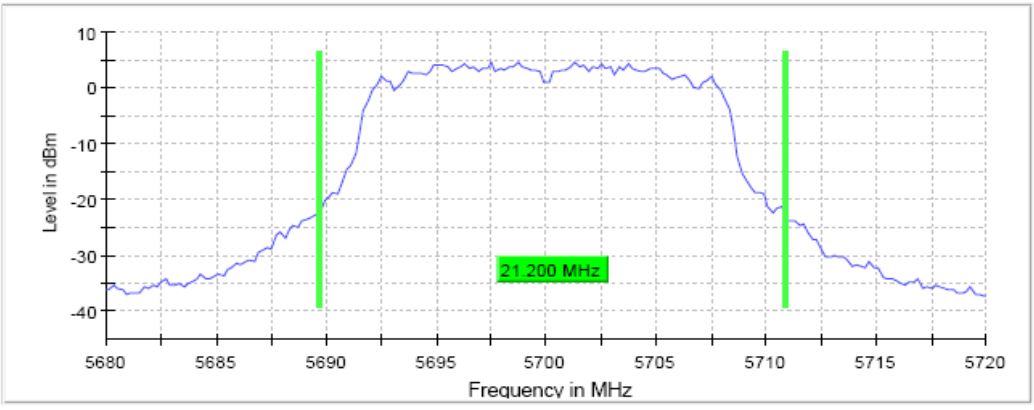
Lowest Channel



Middle Channel

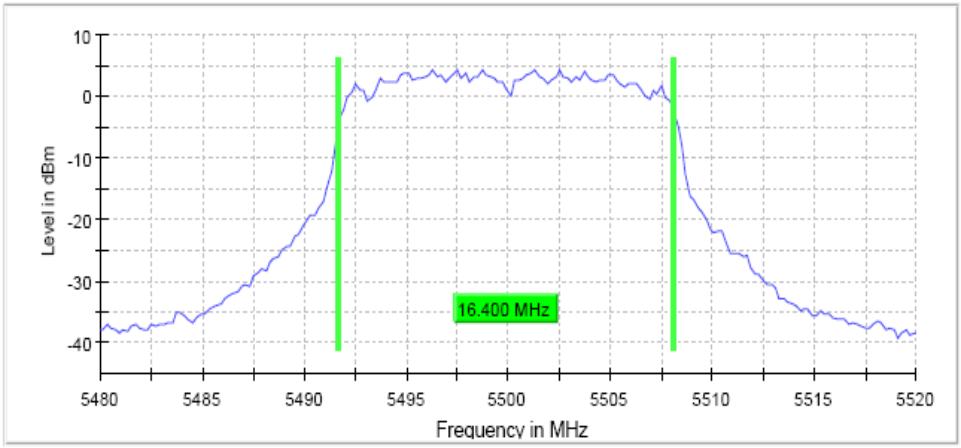


Highest Channel

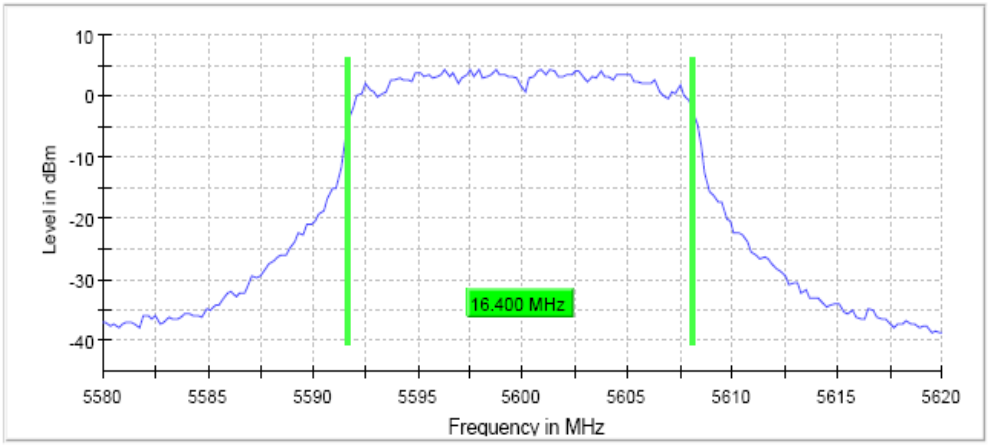


TEST RESULTS (Cont.):	OCCUPIED BANDWIDTH

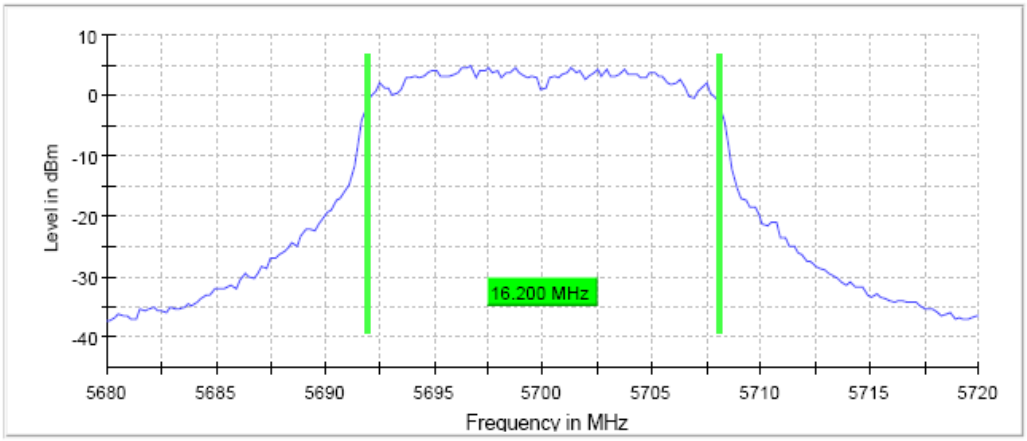
Lowest Channel



Middle Channel



Highest Channel



TEST RESULTS (Cont.)	

Measurement

Setting	Instrument Value	Instrument Value	Instrument Value
Start Frequency	5.48000 GHz	5.58000 GHz	5.68000 GHz
Stop Frequency	5.52000 GHz	5.62000 GHz	5.72000 GHz
Span	40.000 MHz	40.000 MHz	40.000 MHz
RBW	200.000 kHz	200.000 KHz	200.000 kHz
VBW	1.000 MHz	1.000 MHz	1.000 MHz
SweepPoints	200	200	200
Sweeptime	28.443 µs	28.443 µs	28.443 µs
Reference Level	20.000 dBm	20.000 dBm	20.000 dBm
Attenuation	40.000 dB	40.000 dB	40.000 dB
Detector	MaxPeak	MaxPeak	MaxPeak
SweepCount	200	200	200
Filter	3 dB	3 dB	3 dB
Trace Mode	Max Hold	Max Hold	Max Hold
Sweeptype	FFT	FFT	FFT
Preamp	off	off	off
Stablemode	Trace	Trace	Trace
Stablevalue	0.30 dB	0.30 dB	0.30 dB
Run	57 / max. 150	85 / max. 150	38 / max. 150
Stable	5 / 5	5 / 5	5 / 5
Max Stable Difference	0.25 dB	0.00 dB	0.24 dB

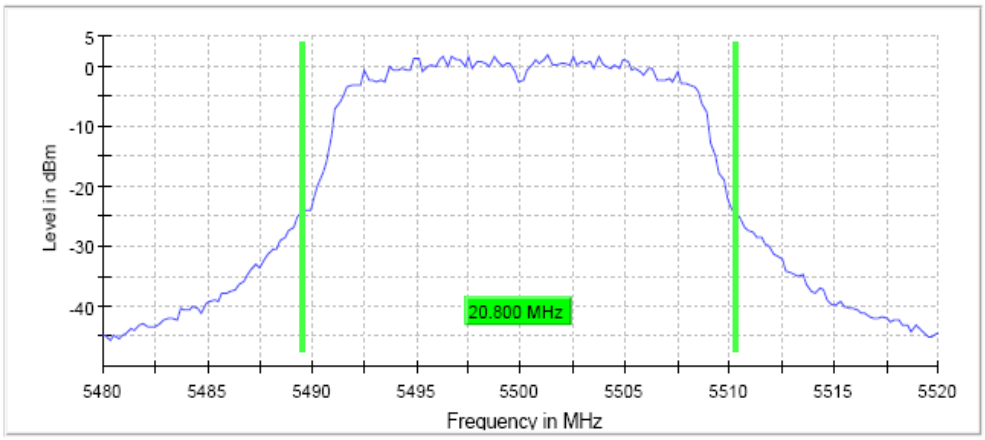
TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#02 **(n Mode)**
TEST RESULTS:	PASS

Bandwidth: 20 MHz

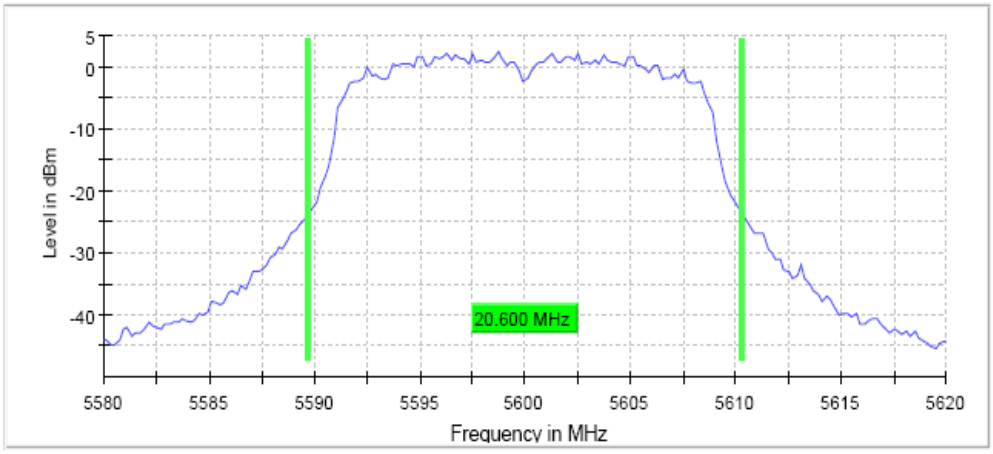
	Lowest frequency 5500 MHz	Middle frequency 5600 MHz	Highest frequency 5700 MHz
26dB bandwidth (MHz)	20.8	20.6	21
Occupied bandwidth (MHz)	17.4	17.4	17.4
Measurement uncertainty (kHz)	<± 8.33		

TEST RESULTS (Cont.):	26 dB BANDWIDTH

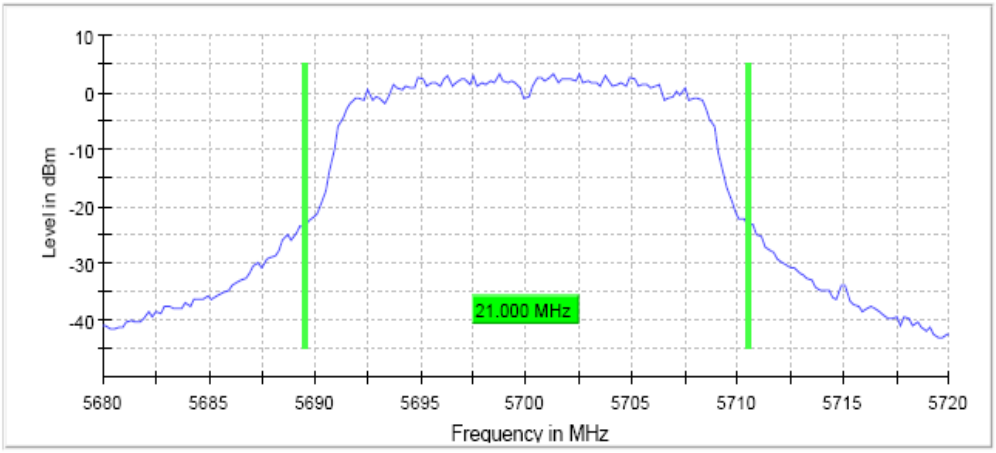
Lowest Channel



Middle Channel

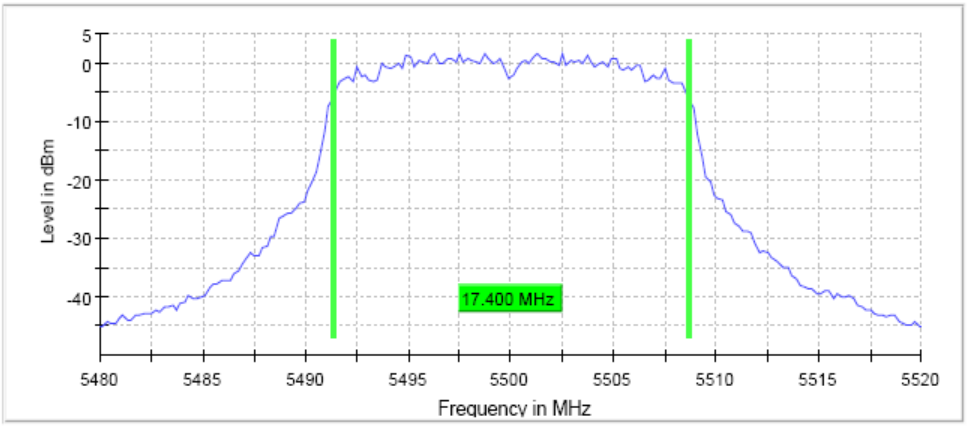


Highest Channel

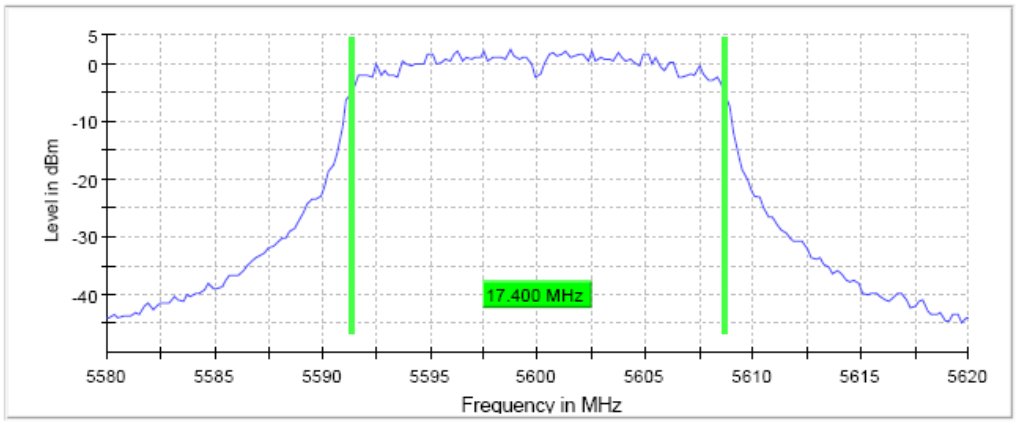


TEST RESULTS (Cont.):	OCCUPIED BANDWIDTH

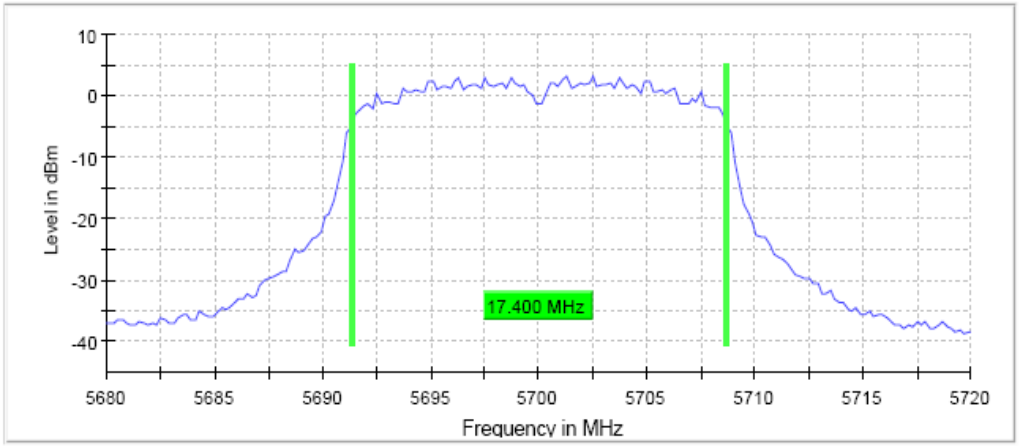
Lowest Channel



Middle Channel



Highest Channel



TEST RESULTS (Cont.)	

Measurement

Setting	Instrument Value	Instrument Value	Instrument Value
Start Frequency	5.48000 GHz	5.58000 GHz	5.68000 GHz
Stop Frequency	5.52000 GHz	5.62000 GHz	5.72000 GHz
Span	40.000 MHz	40.000 MHz	40.000 MHz
RBW	200.000 kHz	200.000 KHz	200.000 kHz
VBW	1.000 MHz	1.000 MHz	1.000 MHz
SweepPoints	200	200	200
Sweeptime	28.443 µs	28.443 µs	28.443 µs
Reference Level	20.000 dBm	20.000 dBm	20.000 dBm
Attenuation	40.000 dB	40.000 dB	40.000 dB
Detector	MaxPeak	MaxPeak	MaxPeak
SweepCount	200	200	200
Filter	3 dB	3 dB	3 dB
Trace Mode	Max Hold	Max Hold	Max Hold
Sweeptype	FFT	FFT	FFT
Preamp	off	off	off
Stablemode	Trace	Trace	Trace
Stablevalue	0.30 dB	0.30 dB	0.30 dB
Run	63 / max. 150	47 / max. 150	66 / max. 150
Stable	5 / 5	5 / 5	5 / 5
Max Stable Difference	0.16 dB	0.00 dB	0.00 dB

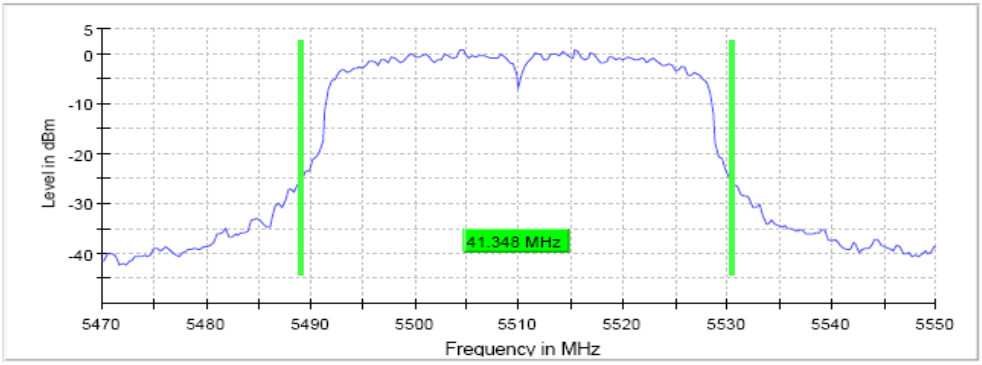
TEST RESULTS (Cont.)	n Mode

Bandwidth: 40 MHz

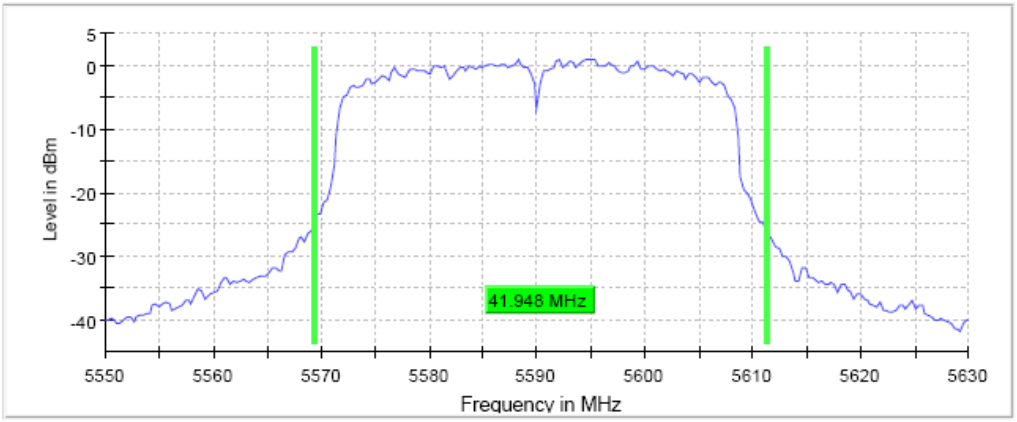
	Lowest frequency 5510 MHz	Middle frequency 5590 MHz	Highest frequency 5710 MHz
26dB bandwidth (MHz)	41.348	41.948	41.948
Occupied bandwidth (MHz)	36.5	36.5	36.0
Measurement uncertainty (kHz)	<± 8.33		

TEST RESULTS (Cont.):	26 dB BANDWIDTH

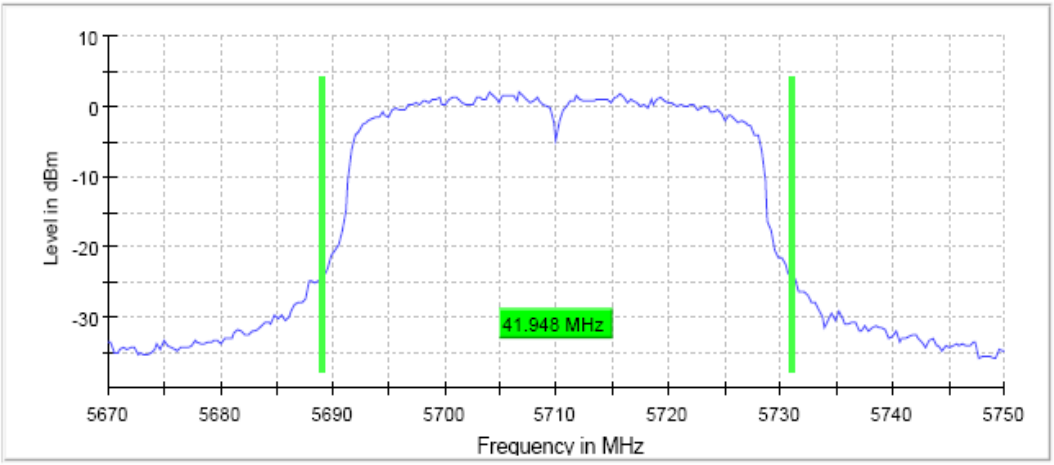
Lowest Channel



Middle Channel

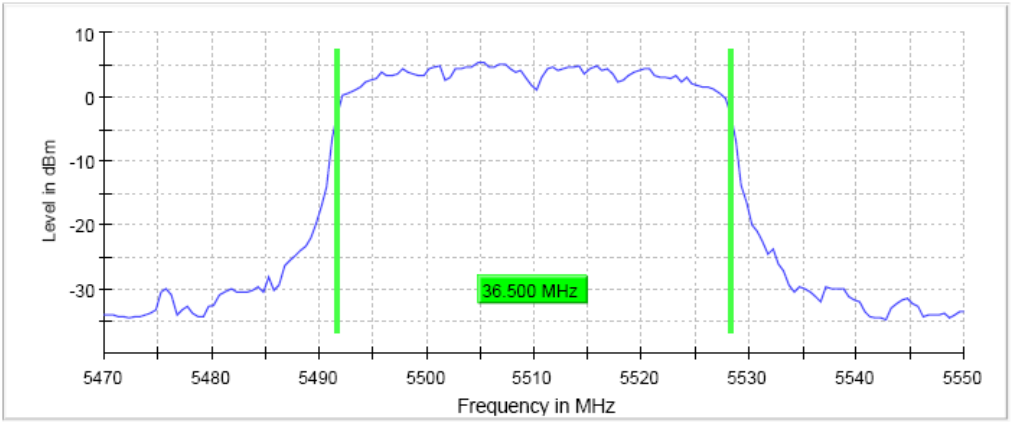


Highest Channel

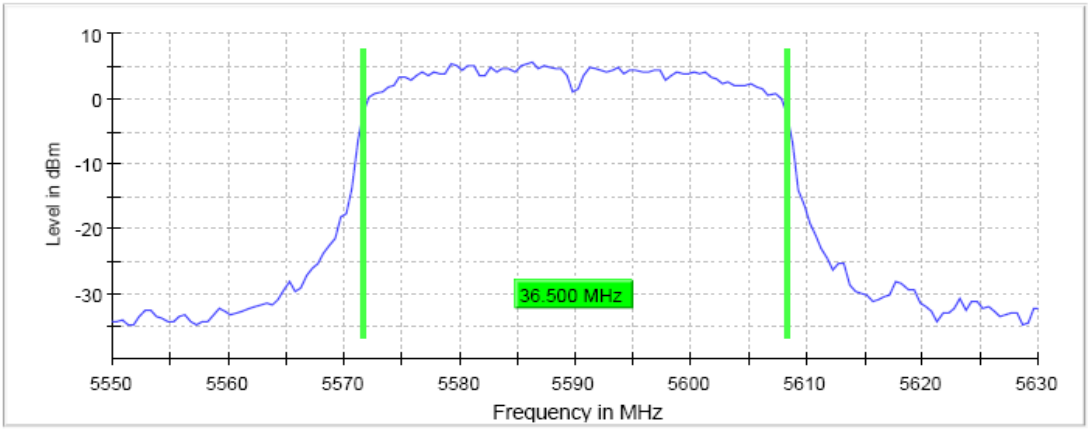


TEST RESULTS (Cont.):	OCCUPIED BANDWIDTH

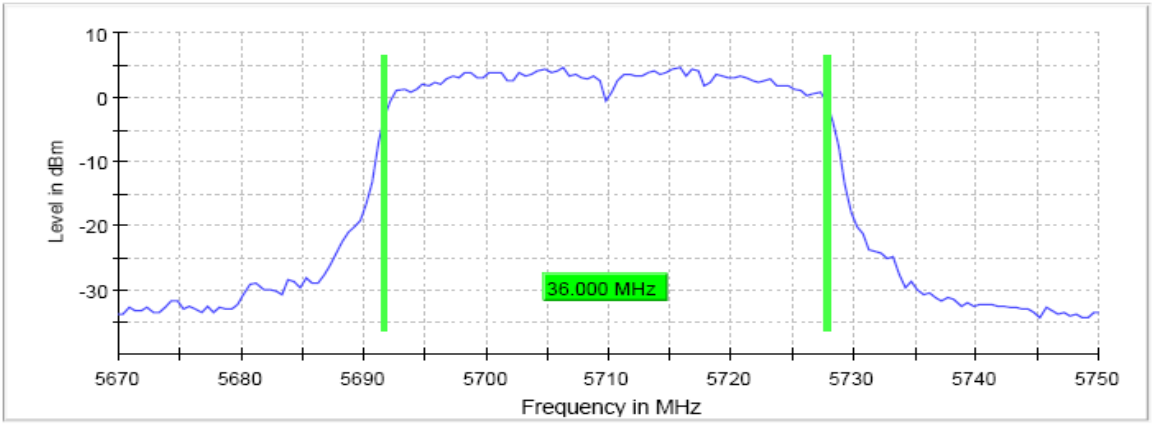
Lowest Channel



Middle Channel



Highest Channel



TEST RESULTS (Cont.)	

Measurement

Setting	Instrument Value	Instrument Value	Instrument Value
Start Frequency	5.47000 GHz	5.55000 GHz	5.67000 GHz
Stop Frequency	5.55000 GHz	5.63000 GHz	5.75000 GHz
Span	80.000 MHz	80.000 MHz	80.000 MHz
RBW	500.000 KHz	500.000 KHz	500.000 KHz
VBW	2.000 MHz	2.000 MHz	2.000 MHz
SweepPoints	160	160	160
Sweeptime	18.962 us	18.962 us	18.962 us
Reference Level	20.000 dBm	20.000 dBm	20.000 dBm
Attenuation	40.000 dB	40.000 dB	40.000 dB
Detector	MaxPeak	MaxPeak	MaxPeak
SweepCount	200	200	200
Filter	3 dB	3 dB	3 dB
Trace Mode	Max Hold	Max Hold	Max Hold
Sweeptype	FFT	FFT	FFT
Preamp	off	off	off
Stablemode	Trace	Trace	Trace
Stablevalue	0.30 dB	0.30 dB	0.30 dB
Run	51 / max. 150	51 / max. 150	32 / max. 150
Stable	5 / 5	5 / 5	5 / 5
Max Stable	0.07 dB	0.08 dB	0.00 dB

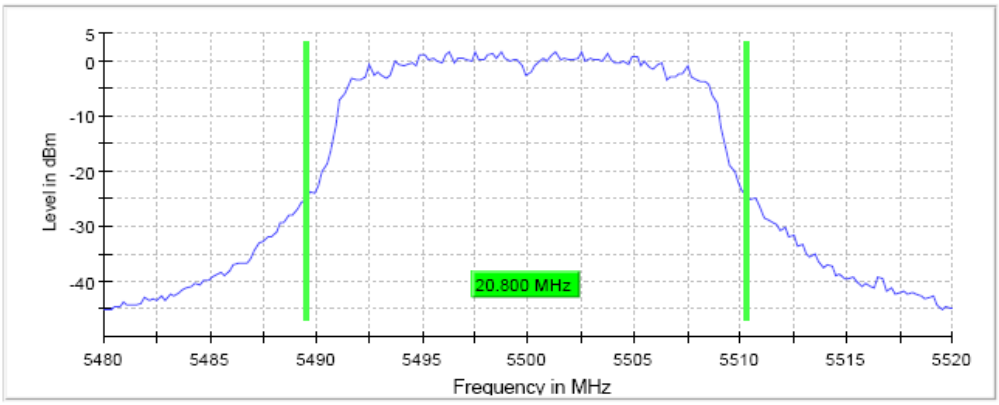
TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#03 (ac mode)
TEST RESULTS:	PASS

Bandwidth: 20 MHz

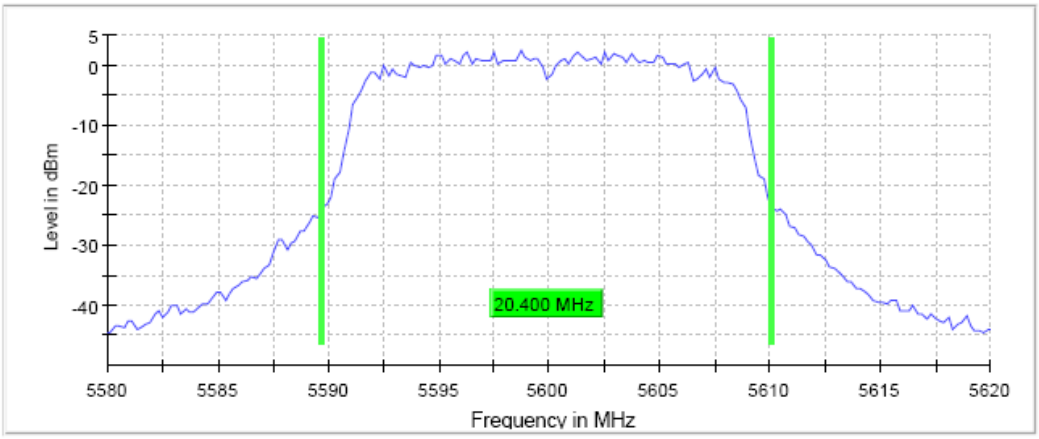
	Lowest frequency 5500 MHz	Middle frequency 5600 MHz	Highest frequency 5700 MHz
26db bandwidth (MHz)	20.8	20.4	21
Occupied bandwidth (MHz)	17.4	17.4	17.4
Measurement uncertainty (kHz)	<± 8.33		

TEST RESULTS (Cont.):	26 dB BANDWIDTH

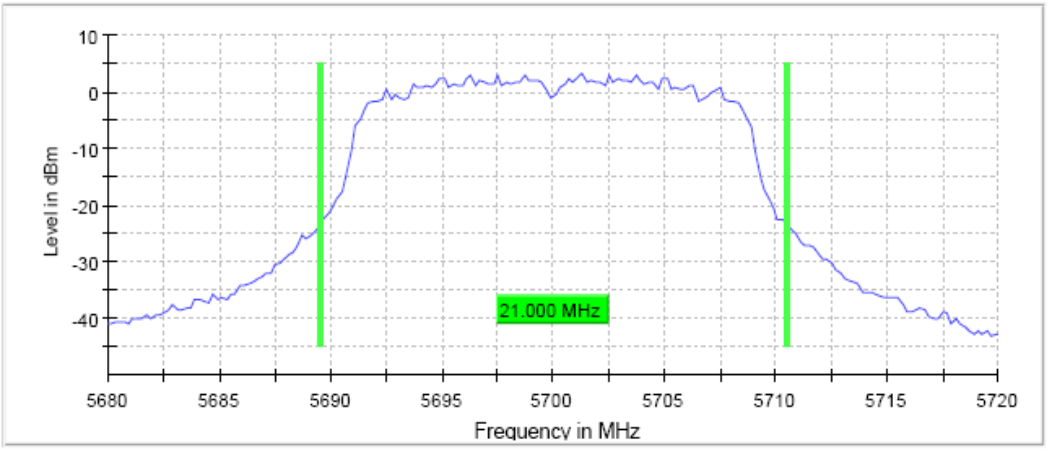
Lowest Channel



Middle Channel

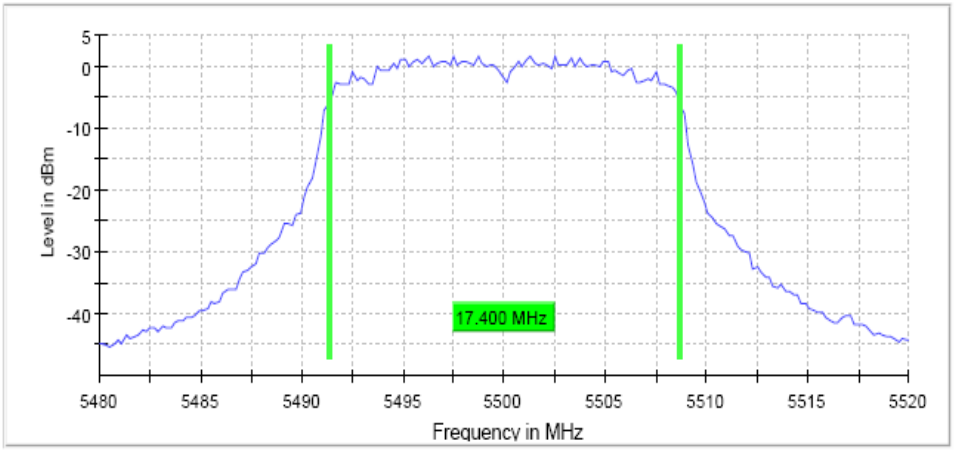


Highest Channel

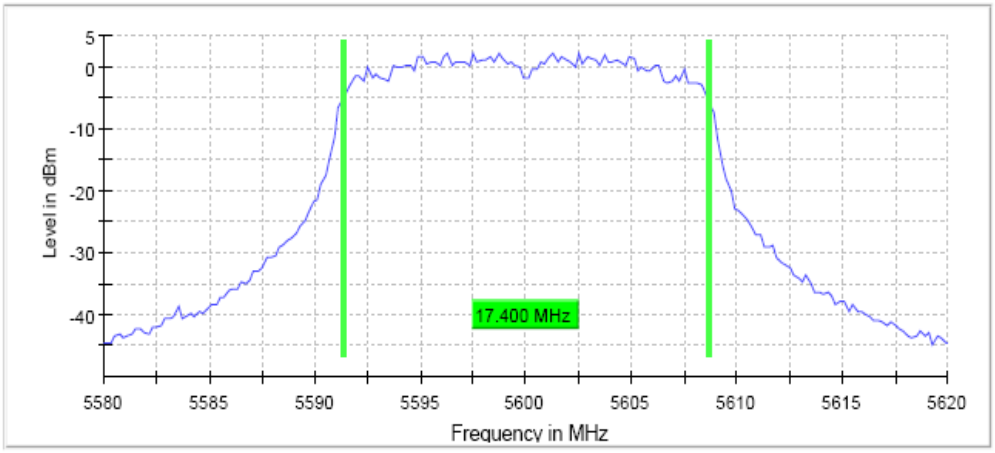


TEST RESULTS (Cont.):	OCCUPIED BANDWIDTH

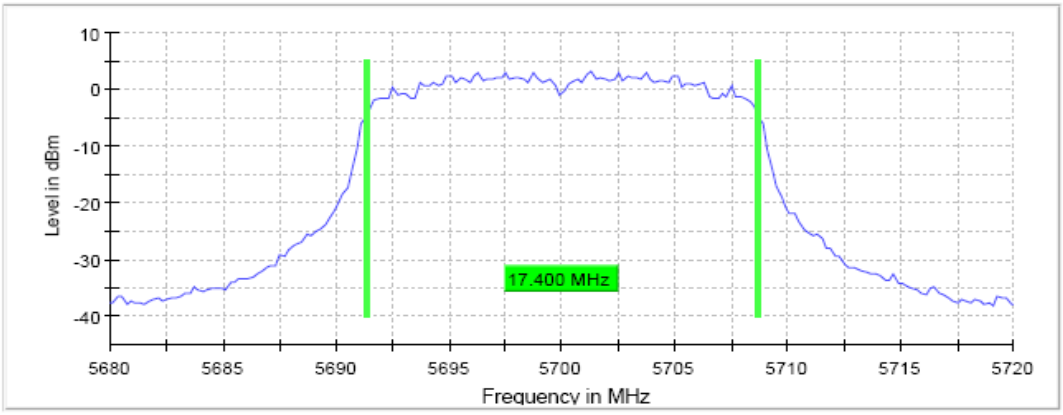
Lowest Channel



Middle Channel



Highest Channel



TEST RESULTS (Cont.)	

Measurement

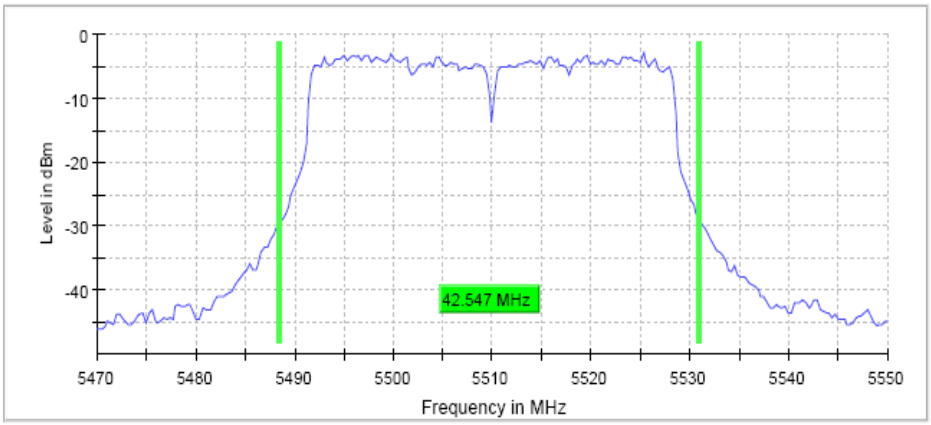
Setting	Instrument Value	Instrument Value	Instrument Value
Start Frequency	5.48000 GHz	5.58000 GHz	5.68000 GHz
Stop Frequency	5.52000 GHz	5.62000 GHz	5.72000 GHz
Span	40.000 MHz	40.000 MHz	40.000 MHz
RBW	200.000 kHz	200.000 KHz	200.000 kHz
VBW	1.000 MHz	1.000 MHz	1.000 MHz
SweepPoints	200	200	200
Sweeptime	28.443 µs	28.443 µs	28.443 µs
Reference Level	20.000 dBm	20.000 dBm	20.000 dBm
Attenuation	40.000 dB	40.000 dB	40.000 dB
Detector	MaxPeak	MaxPeak	MaxPeak
SweepCount	200	200	200
Filter	3 dB	3 dB	3 dB
Trace Mode	Max Hold	Max Hold	Max Hold
Sweeptype	FFT	FFT	FFT
Preamp	off	off	off
Stablemode	Trace	Trace	Trace
Stablevalue	0.30 dB	0.30 dB	0.30 dB
Run	50 / max. 150	50 / max. 150	54 / max. 150
Stable	5 / 5	5 / 5	5 / 5
Max Stable Difference	0.05 dB	0.00 dB	0.28 dB

TEST RESULTS	ac mode (40 MHz)

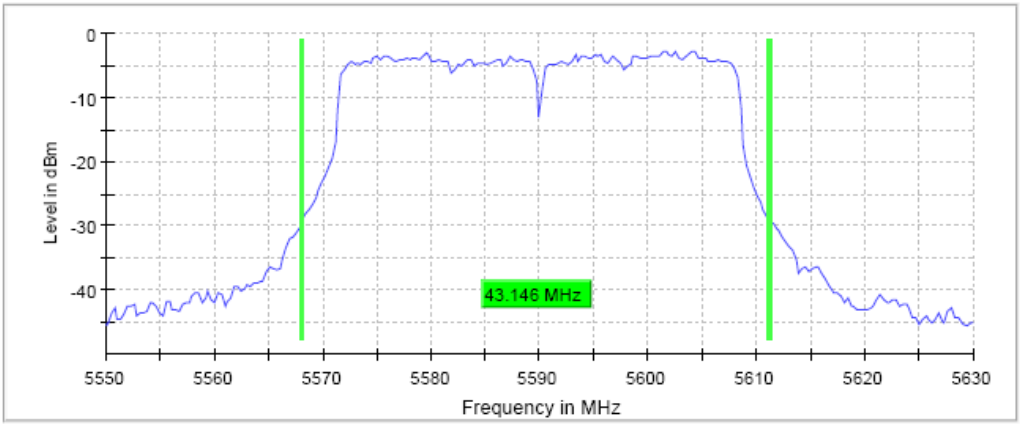
	Lowest frequency 5510 MHz	Middle frequency 5590 MHz	Highest frequency 5710 MHz
26dB bandwidth (MHz)	42.547	43.146	44.045
Occupied bandwidth (MHz)	36.5	36.0	36.5
Measurement uncertainty (kHz)	<± 8.33		

TEST RESULTS (Cont.):	26 dB BANDWIDTH

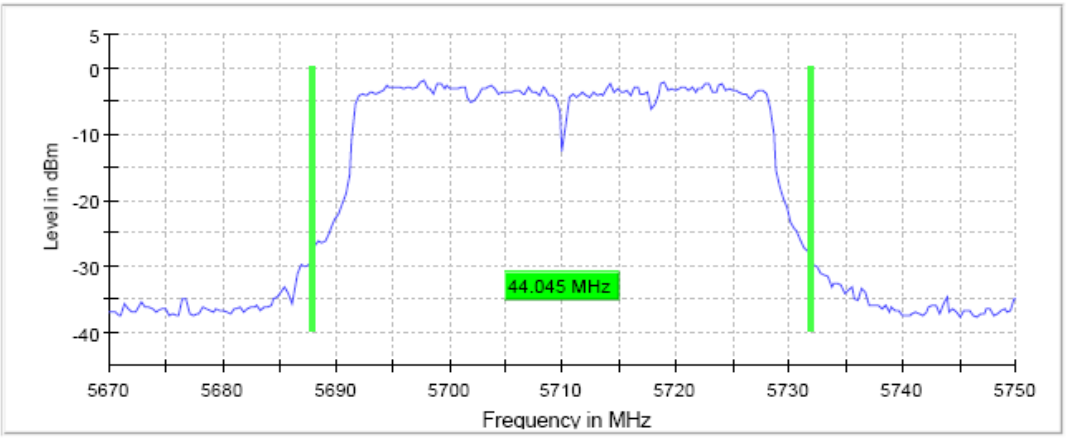
Lowest Channel



Middle Channel

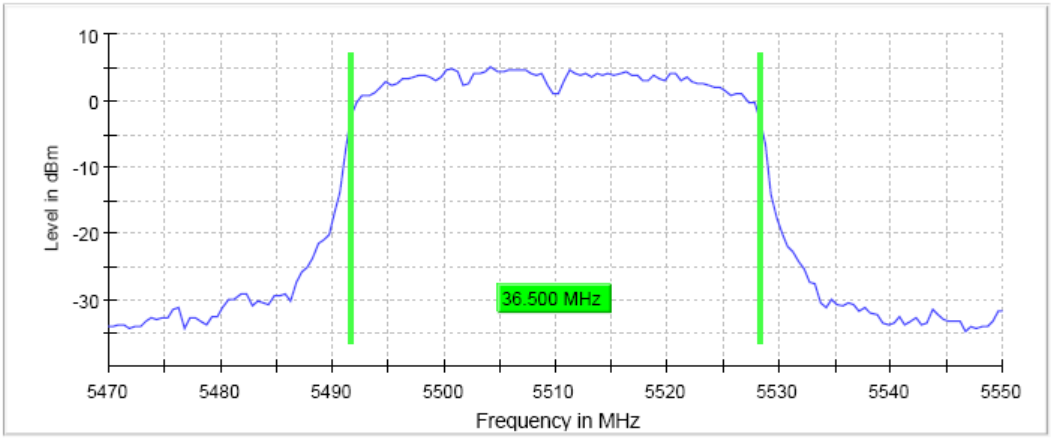


Highest Channel

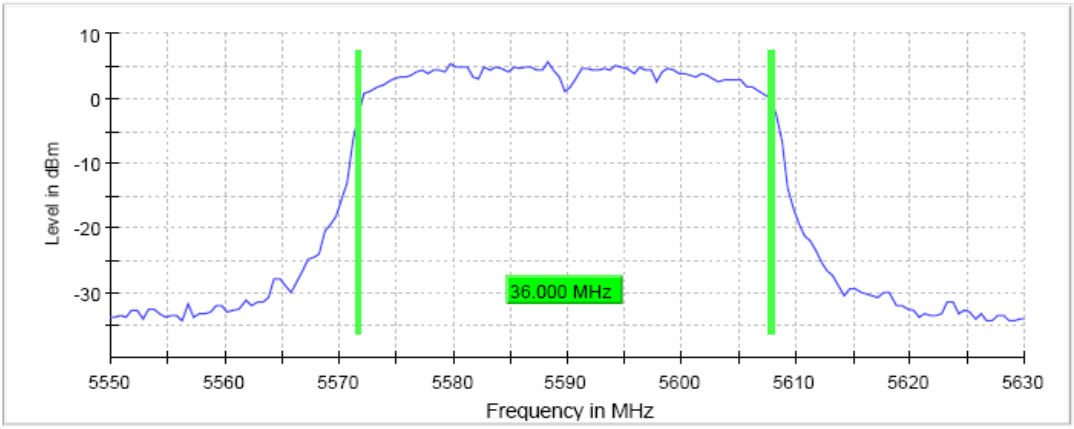


TEST RESULTS (Cont.):	OCCUPIED BANDWIDTH

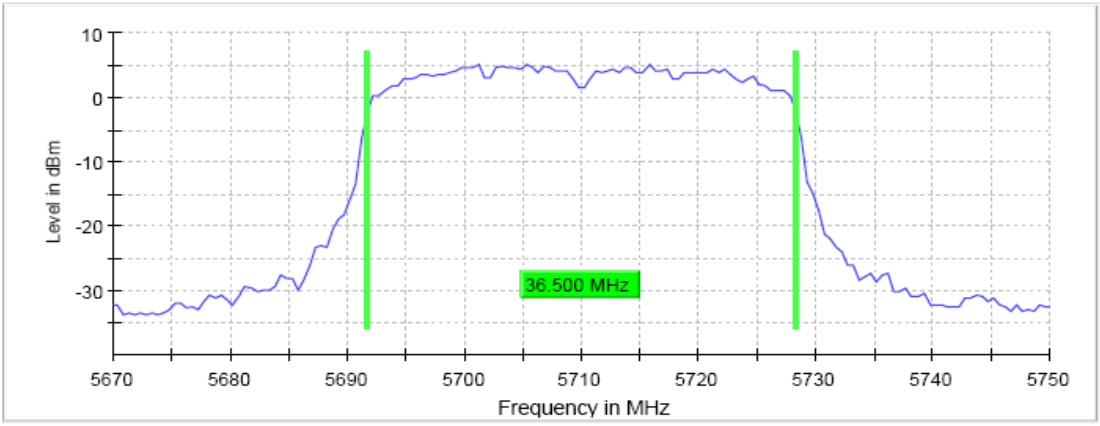
Lowest Channel



Middle Channel



Highest Channel



TEST RESULTS (Cont.)	

Measurement

Setting	Instrument Value	Instrument Value	Instrument Value
Start Frequency	5.47000 GHz	5.55000 GHz	5.67000 GHz
Stop Frequency	5.55000 GHz	5.63000 GHz	5.75000 GHz
Span	80.000 MHz	80.000 MHz	80.000 MHz
RBW	500.000 kHz	500.000 kHz	500.000 kHz
VBW	2.000 MHz	2.000 MHz	2.000 MHz
SweepPoints	160	160	160
Sweeptime	18.962 us	18.962 us	18.962 us
Reference Level	20.000 dBm	20.000 dBm	20.000 dBm
Attenuation	40.000 dB	40.000 dB	40.000 dB
Detector	MaxPeak	MaxPeak	MaxPeak
SweepCount	200	200	200
Filter	3 dB	3 dB	3 dB
Trace Mode	Max Hold	Max Hold	Max Hold
Sweeptype	FFT	FFT	FFT
Preamp	off	off	off
Stablemode	Trace	Trace	Trace
Stablevalue	0.30 dB	0.30 dB	0.30 dB
Run	49 / max. 150	119 / max. 150	70 / max. 150
Stable	5 / 5	5 / 5	5 / 5
Max Stable Difference	0.00 dB	0.00 dB	0.00 dB

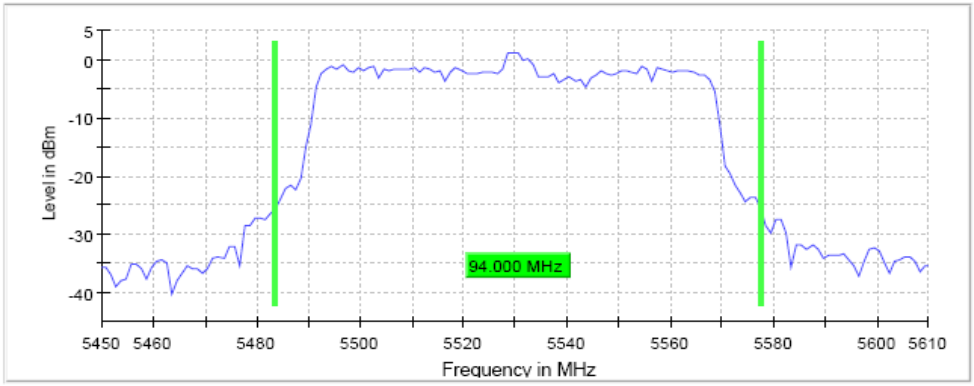
TEST RESULTS	ac mode (80 MHz)

Bandwidth: 80 MHz

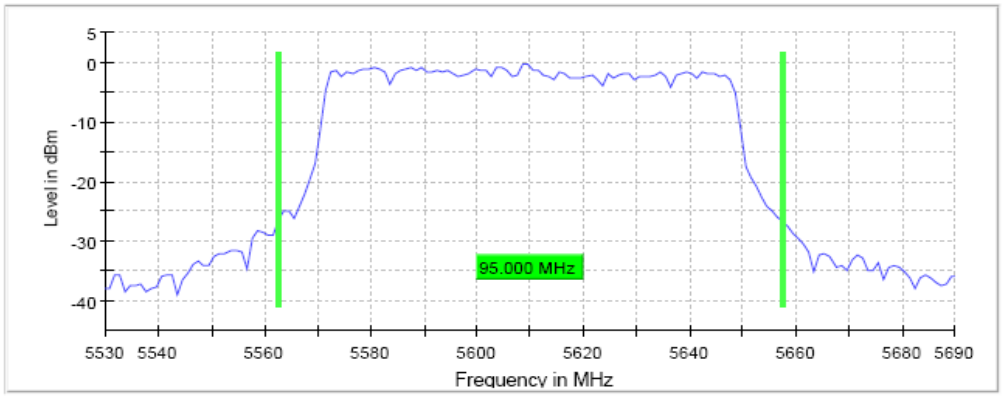
	Lowest frequency 5530 MHz	Middle frequency 5610 MHz	Highest frequency 5690 MHz
26dB bandwidth (MHz)	94	95	94
Occupied bandwidth (MHz)	76.5	76.5	76.5
Measurement uncertainty (kHz)	<± 8.33		

TEST RESULTS (Cont.):	26 dB BANDWIDTH

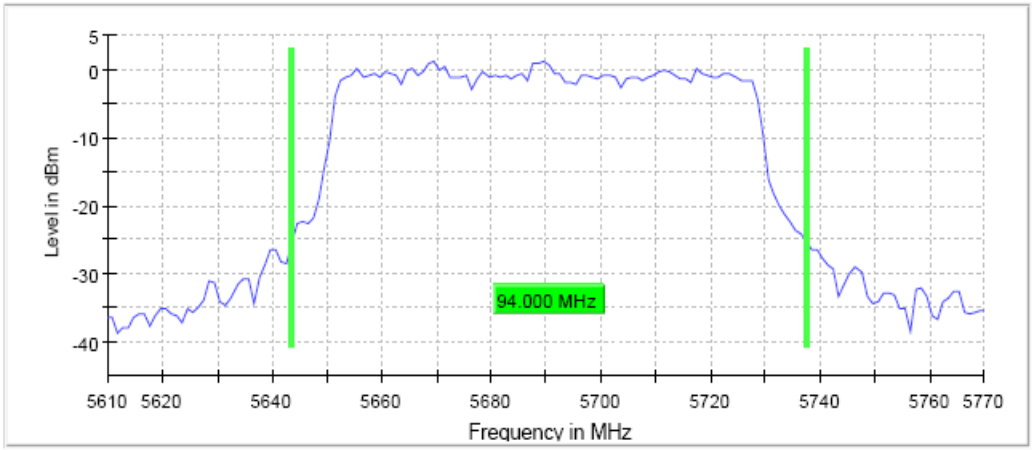
Lowest Channel



Middle Channel

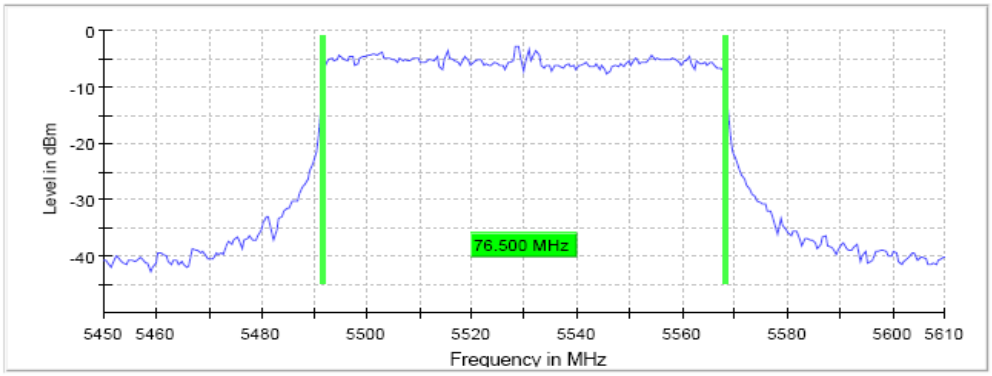


Highest Channel

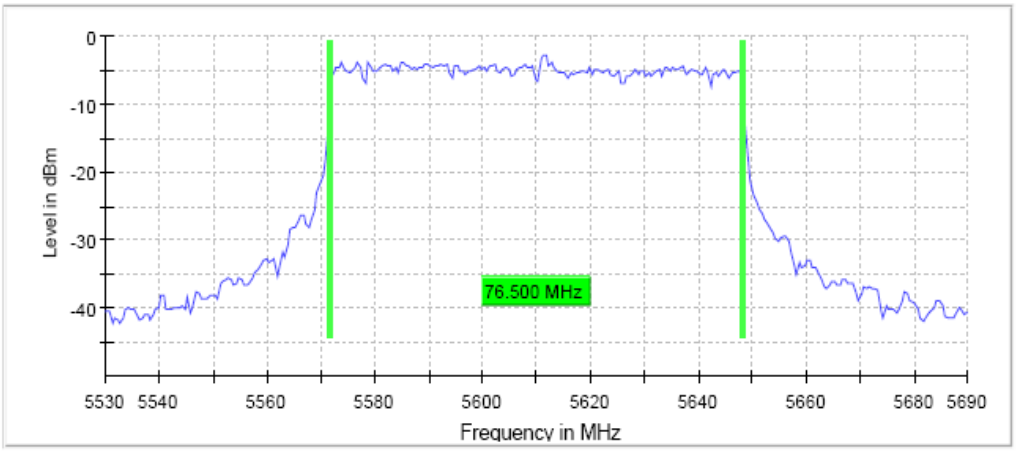


TEST RESULTS (Cont.):	OCCUPIED BANDWIDTH

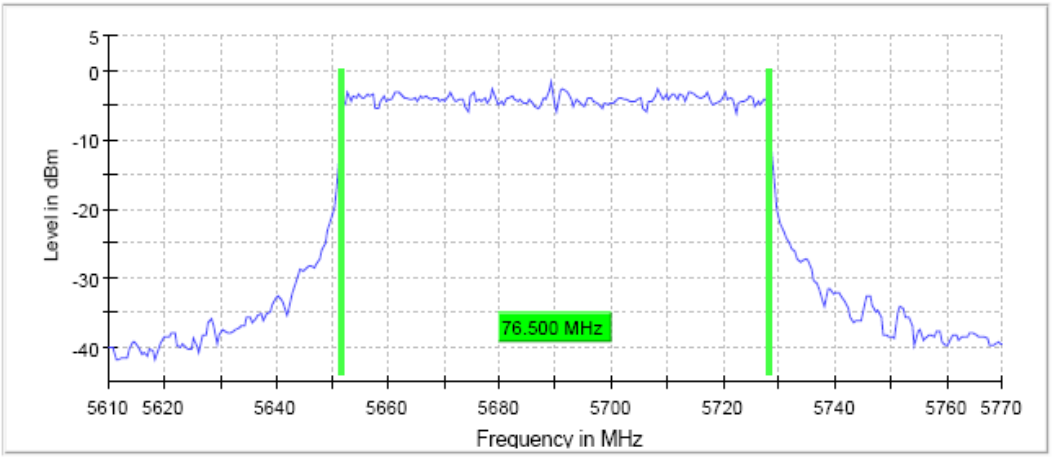
Lowest Channel



Middle Channel



Highest Channel



TEST RESULTS (Cont.)

Measurement

Setting	Instrument Value	Instrument Value	Instrument Value
Start Frequency	5.45000 GHz	5.53000 GHz	5.61000 GHz
Stop Frequency	5.61000 GHz	5.69000 GHz	5.77000 GHz
Span	160.000 MHz	160.000 MHz	160.000 MHz
RBW	1.000 MHz	1.000 MHz	1.000 MHz
VBW	3.000 MHz	3.000 MHz	3.000 MHz
SweepPoints	160	160	160
Sweeptime	22.754 µs	22.754 µs	22.754 µs
Reference Level	10.000 dBm	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	30.000 dB	30.000 dB
Detector	MaxPeak	MaxPeak	MaxPeak
SweepCount	200	200	200
Filter	3 dB	3 dB	3 dB
Trace Mode	Max Hold	Max Hold	Max Hold
Sweeptype	FFT	FFT	FFT
Preamp	off	off	off
Stablemode	Trace	Trace	Trace
Stablevalue	0.30 dB	0.30 dB	0.30 dB
Run	86 / max. 150	70 / max. 150	53 / max. 150
Stable	5 / 5	5 / 5	5 / 5
Max Stable Difference	0.00 dB	0.00 dB	0.00 dB

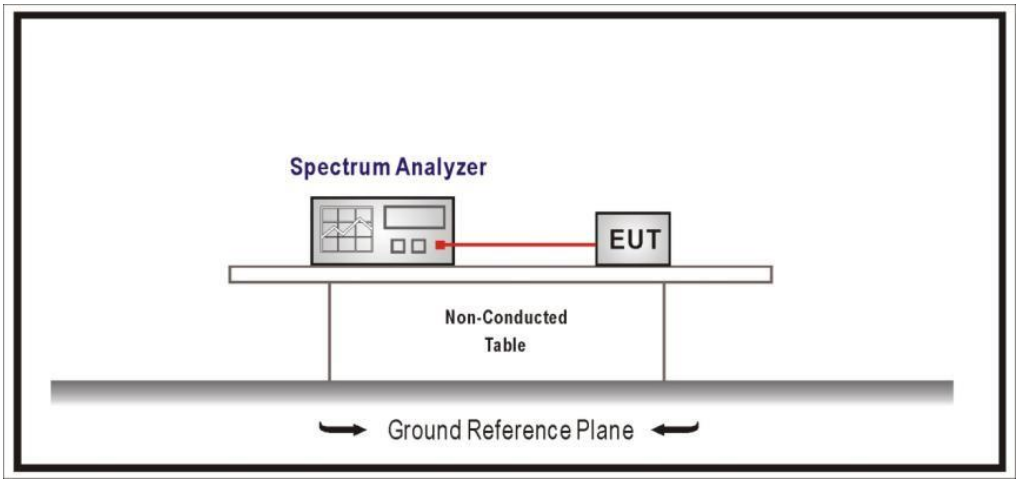
TEST D.2: 6DB EMISSION BANDWIDTH

LIMITS:	Product standard:	Part 15 Subpart C §15.407 and RSS-247
	Test standard:	Part 15 Subpart C §15.407(e) and RSS-247 6.2.4.1

LIMITS:

Within the 5.725 – 5.85 GHz band, the minimum 6dB bandwidth of U-NII devices shall be at least 500 KHz.

TEST SETUP:	



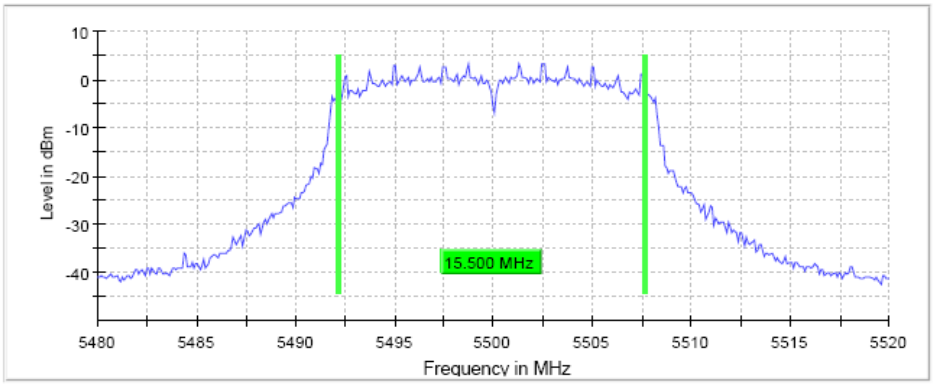
TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#01 **(a mode)**
TEST RESULTS:	PASS

Bandwidth: 20 MHz

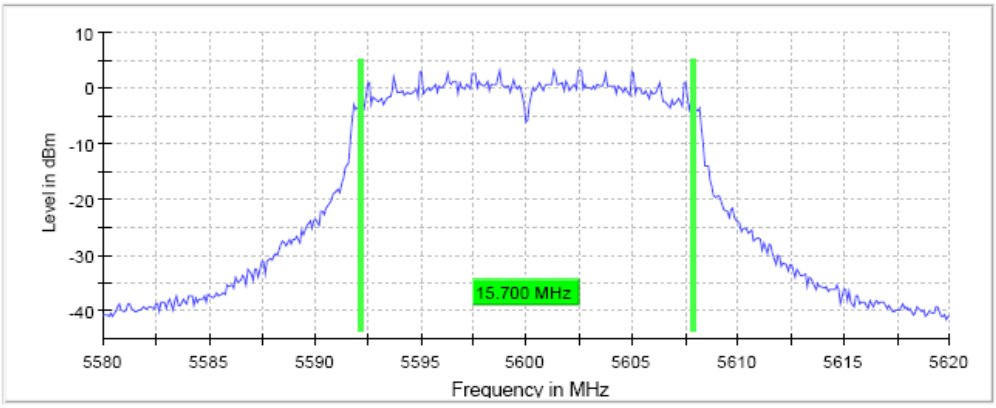
	Lowest frequency 5500 MHz	Middle frequency 5600 MHz	Highest frequency 5700 MHz
6dB Bandwidth (MHz)	15.5	15.7	15.3
Measurement uncertainty (kHz)	<± 8.33		

TEST RESULTS (Cont.):	6 dB BANDWIDTH

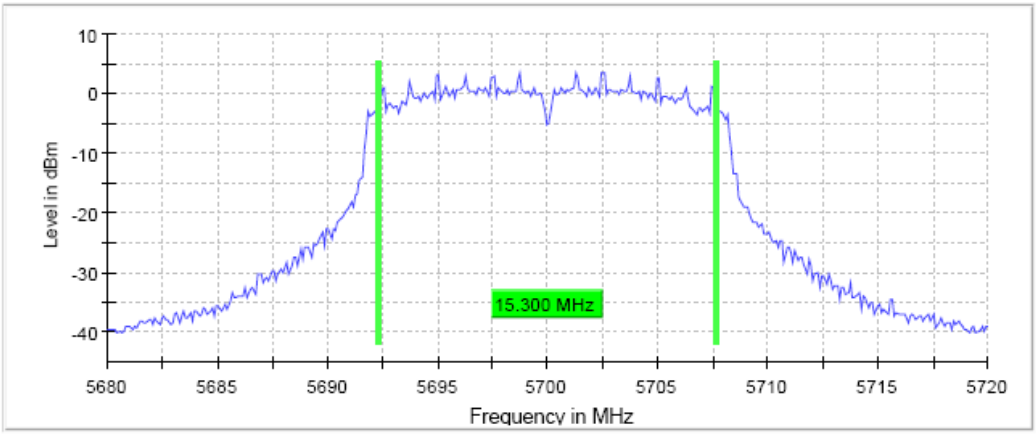
Lowest Channel



Middle Channel



Highest Channel



TEST RESULTS (Cont.)	

Measurement

Setting	Instrument Value	Instrument Value	Instrument Value
Start Frequency	5.48000 GHz	5.58000 GHz	5.68000 GHz
Stop Frequency	5.52000 GHz	5.62000 GHz	5.72000 GHz
Span	40.000 MHz	40.000 MHz	40.000 MHz
RBW	100.000 kHz	100.000 kHz	100.000 kHz
VBW	300.000 kHz	300.000 kHz	300.000 kHz
SweepPoints	400	400	400
Sweeptime	56.886 µs	56.886 µs	56.886 µs
Reference Level	20.000 dBm	20.000 dBm	20.000 dBm
Attenuation	40.000 dB	40.000 dB	40.000 dB
Detector	MaxPeak	MaxPeak	MaxPeak
SweepCount	200	200	200
Filter	3 dB	3 dB	3 dB
Trace Mode	Max Hold	Max Hold	Max Hold
Sweeptype	FFT	FFT	FFT
Preamp	off	off	off
Stablemode	Trace	Trace	Trace
Stablevalue	0.30 dB	0.30 dB	0.30 dB
Run	41 / max. 150	99 / max. 150	59 / max. 150
Stable	5 / 5	5 / 5	5 / 5
Max Stable Difference	0.18 dB	0.00 dB	0.00 dB

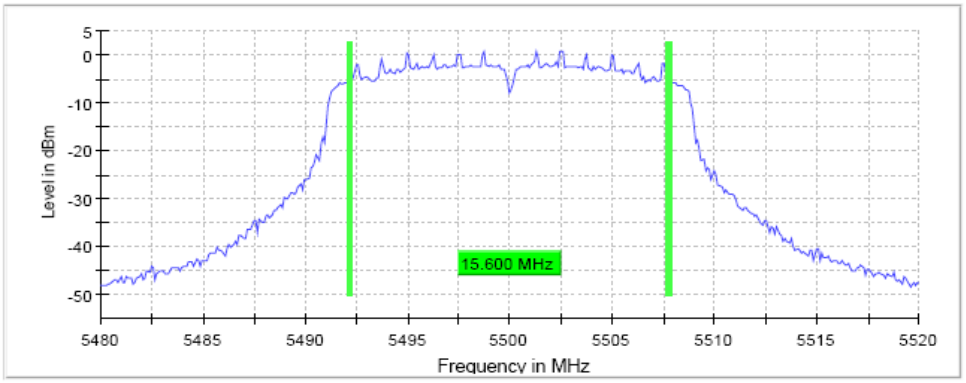
TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#02 **(n Mode)**
TEST RESULTS:	PASS

Bandwidth: 20 MHz

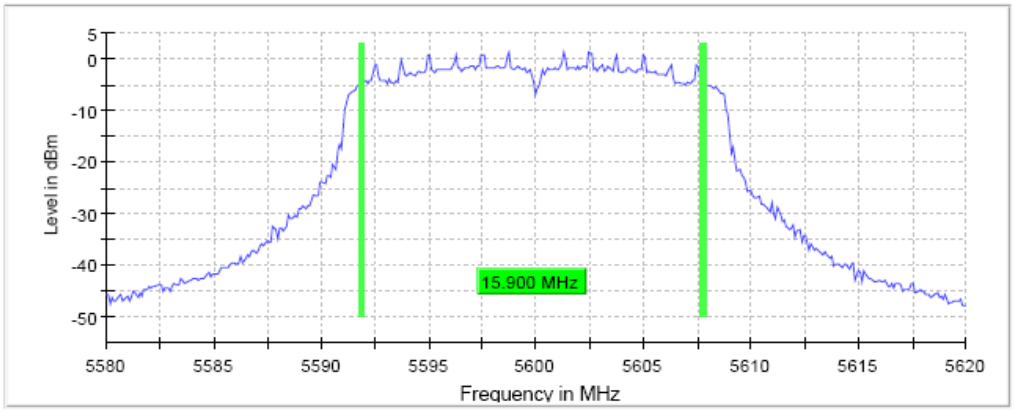
	Lowest frequency 5500 MHz	Middle frequency 5600 MHz	Highest frequency 5700 MHz
6dB bandwidth (MHz)	15.6	15.9	15.4
Measurement uncertainty (kHz)	<± 8.33		

TEST RESULTS (Cont.):	6 dB BANDWIDTH

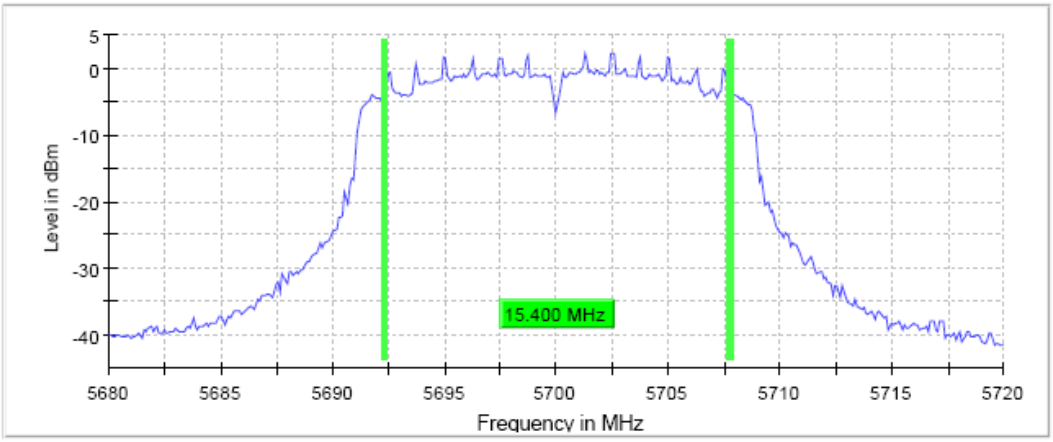
Lowest Channel



Middle Channel



Highest Channel



TEST RESULTS (Cont.)	

Measurement

Setting	Instrument Value	Instrument Value	Instrument Value
Start Frequency	5.48000 GHz	5.58000 GHz	5.68000 GHz
Stop Frequency	5.52000 GHz	5.62000 GHz	5.72000 GHz
Span	40.000 MHz	40.000 MHz	40.000 MHz
RBW	100.000 kHz	100.000 kHz	100.000 kHz
VBW	300.000 kHz	300.000 kHz	300.000 kHz
SweepPoints	400	400	400
Sweeptime	56.886 µs	56.886 µs	56.886 µs
Reference Level	10.000 dBm	10.000 dBm	20.000 dBm
Attenuation	30.000 dB	30.000 dB	40.000 dB
Detector	MaxPeak	MaxPeak	MaxPeak
SweepCount	200	200	200
Filter	3 dB	3 dB	3 dB
Trace Mode	Max Hold	Max Hold	Max Hold
Sweeptype	FFT	FFT	FFT
Preamp	off	off	off
Stablemode	Trace	Trace	Trace
Stablevalue	0.30 dB	0.30 dB	0.30 dB
Run	64 / max. 150	47 / max. 150	58 / max. 150
Stable	5 / 5	5 / 5	5 / 5
Max Stable Difference	0.20 dB	0.00 dB	0.00 dB

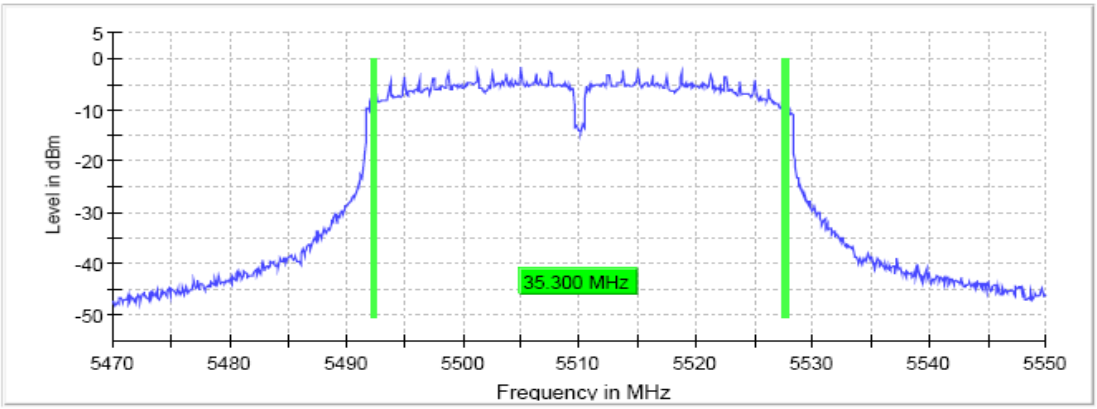
TEST RESULTS (Cont.)	n Mode

Bandwidth: 40 MHz

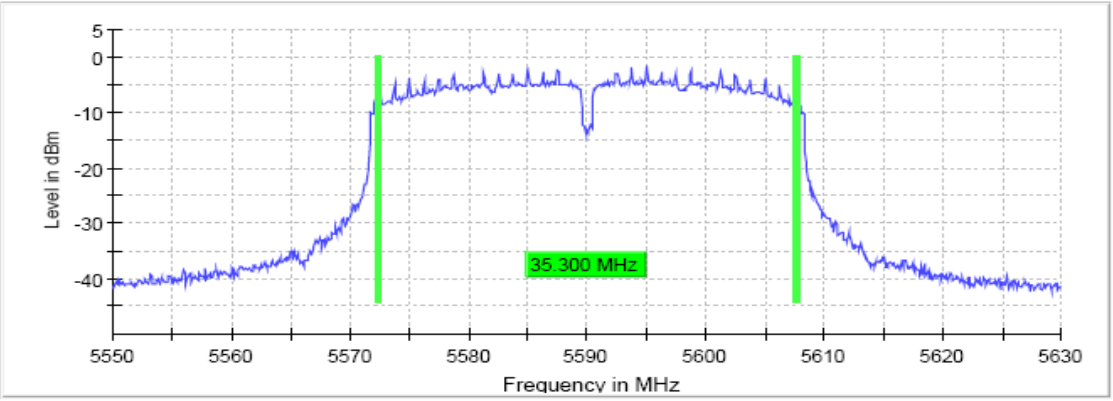
	Lowest frequency 5510 MHz	Middle frequency 5590 MHz	Highest frequency 5710 MHz
6dB bandwidth (MHz)	35.3	35.3	35.3
Measurement uncertainty (kHz)	<± 8.33		

TEST RESULTS (Cont.):	6 dB BANDWIDTH

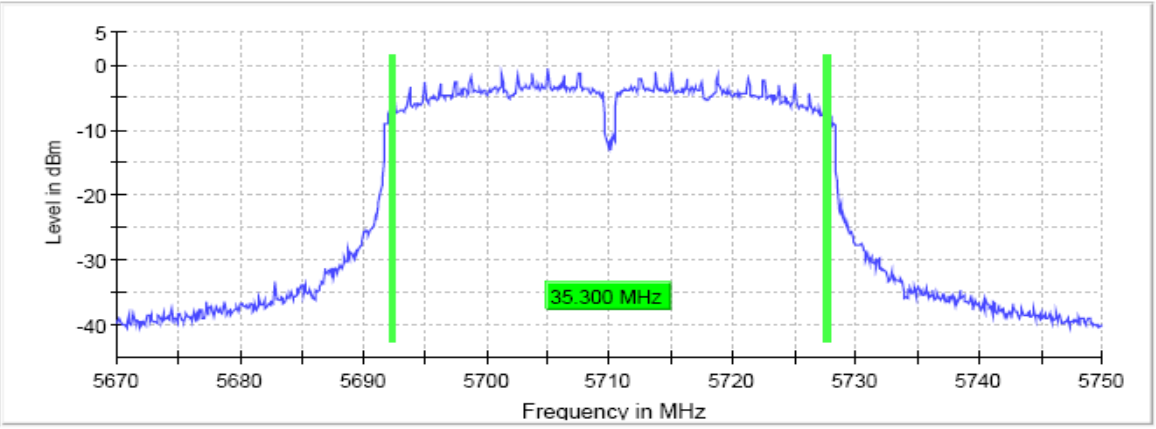
Lowest Channel



Middle Channel



Highest Channel



TEST RESULTS (Cont.)	

Measurement

Setting	Instrument Value	Instrument Value	Instrument Value
Start Frequency	5.47000 GHz	5.55000 GHz	5.67000 GHz
Stop Frequency	5.55000 GHz	5.63000 GHz	5.75000 GHz
Span	80.000 MHz	80.000 MHz	80.000 MHz
RBW	100.000 kHz	100.000 kHz	100.000 kHz
VBW	300.000 KHz	300.000 KHz	300.000 KHz
SweepPoints	800	800	800
Sweeptime	94.810 us	94.810 us	94.810 us
Reference Level	10.000 dBm	20.000 dBm	20.000 dBm
Attenuation	30.000 dB	40.000 dB	40.000 dB
Detector	MaxPeak	MaxPeak	MaxPeak
SweepCount	200	200	200
Filter	3 dB	3 dB	3 dB
Trace Mode	Max Hold	Max Hold	Max Hold
Sweeptype	FFT	FFT	FFT
Preamp	off	off	off
Stablemode	Trace	Trace	Trace
Stablevalue	0.30 dB	0.30 dB	0.30 dB
Run	86 / max. 150	91 / max. 150	100 / max. 150
Stable	5 / 5	5 / 5	5 / 5
Max Stable	0.04 dB	0.07 dB	0.08dB

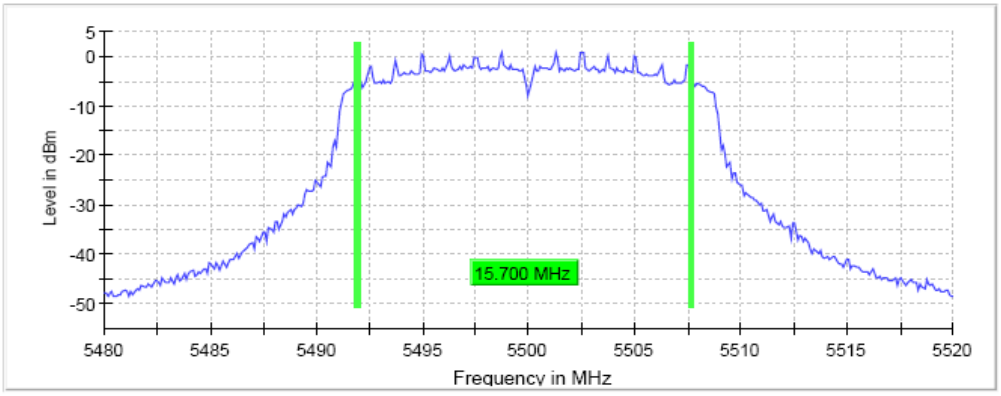
TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#03 (ac mode)
TEST RESULTS:	PASS

Bandwidth: 20 MHz

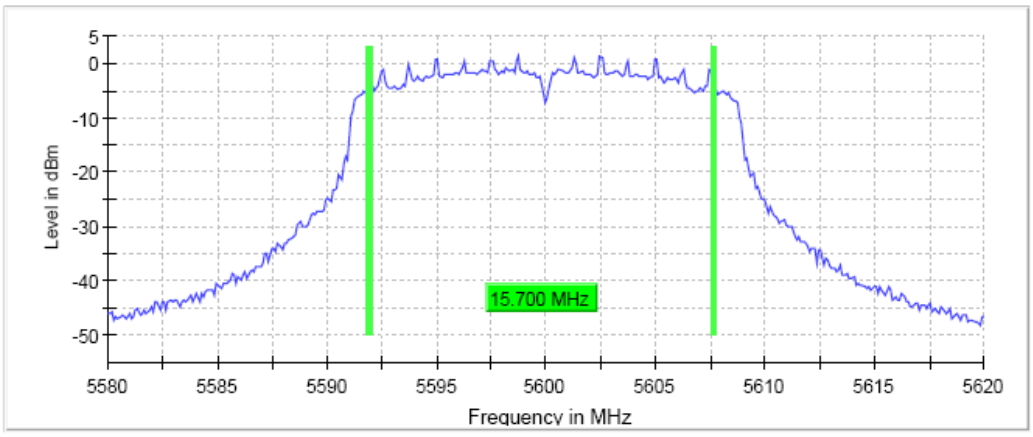
	Lowest frequency 5500 MHz	Middle frequency 5600 MHz	Highest frequency 5700 MHz
6db bandwidth (MHz)	15.7	15.7	15.5
Measurement uncertainty (kHz)	<± 8.33		

TEST RESULTS (Cont.):	6 dB BANDWIDTH

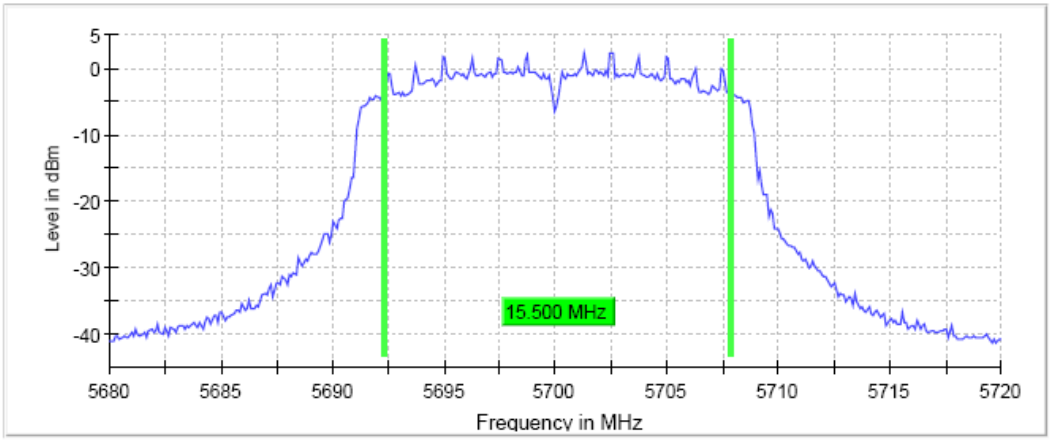
Lowest Channel



Middle Channel



Highest Channel



TEST RESULTS (Cont.)	

Measurement

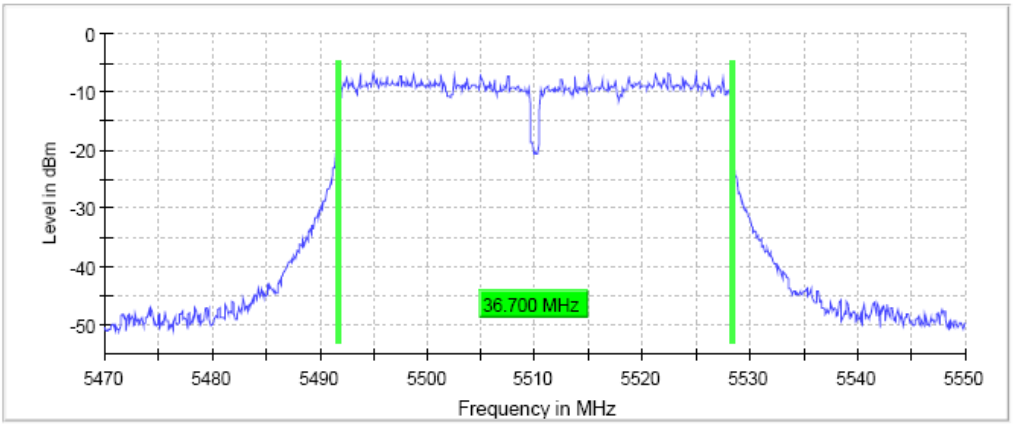
Setting	Instrument Value	Instrument Value	Instrument Value
Start Frequency	5.48000 GHz	5.58000 GHz	5.68000 GHz
Stop Frequency	5.52000 GHz	5.62000 GHz	5.72000 GHz
Span	40.000 MHz	40.000 MHz	40.000 MHz
RBW	100.000 kHz	100.000 kHz	100.000 kHz
VBW	300.000 KHz	300.000 KHz	300.000 KHz
SweepPoints	400	400	400
Sweeptime	56.886 µs	56.886 µs	56.886 µs
Reference Level	10.000 dBm	10.000 dBm	20.000 dBm
Attenuation	30.000 dB	30.000 dB	40.000 dB
Detector	MaxPeak	MaxPeak	MaxPeak
SweepCount	200	200	200
Filter	3 dB	3 dB	3 dB
Trace Mode	Max Hold	Max Hold	Max Hold
Sweeptype	FFT	FFT	FFT
Preamp	off	off	off
Stablemode	Trace	Trace	Trace
Stablevalue	0.30 dB	0.30 dB	0.30 dB
Run	42 / max. 150	74 / max. 150	85 / max. 150
Stable	5 / 5	5 / 5	5 / 5
Max Stable Difference	0.00 dB	0.07 dB	0.02 dB

TEST RESULTS	ac mode (40 MHz)

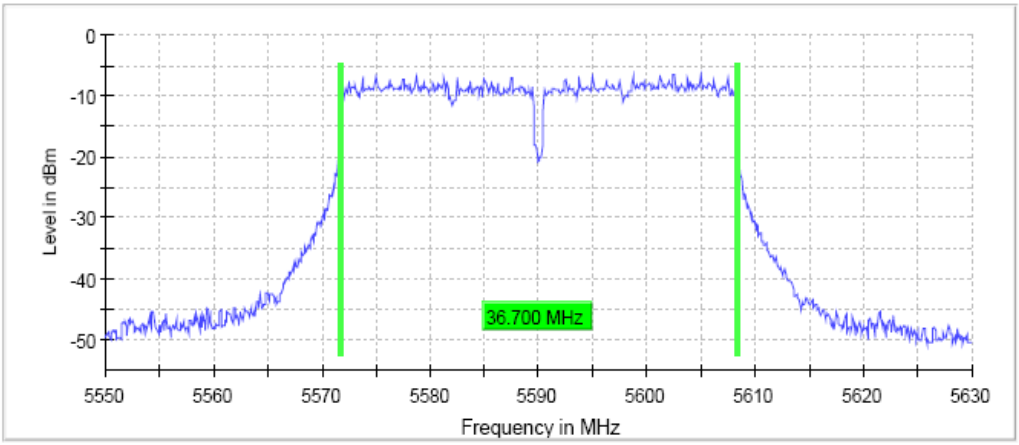
	Lowest frequency 5510 MHz	Middle frequency 5590 MHz	Highest frequency 5710 MHz
6dB bandwidth (MHz)	36.7	36.7	36.7
Measurement uncertainty (kHz)	<± 8.33		

TEST RESULTS (Cont.):	6 dB BANDWIDTH

Lowest Channel



Middle Channel



Highest Channel

TEST RESULTS (Cont.)	

Measurement

Setting	Instrument Value	Instrument Value	Instrument Value
Start Frequency	5.47000 GHz	5.55000 GHz	5.67000
Stop Frequency	5.55000 GHz	5.63000 GHz	5.75000
Span	100.000 kHz	100.000 kHz	100.000 kHz
RBW	300.000 KHz	300.000 KHz	300.000 KHz
VBW	800	800	800
SweepPoints	94.810 µs	94.810 µs	94.810 µs
Sweeptime	10.000 dBm	10.000 dBm	20.000 dBm
Reference Level	30.000 dB	30.000 dB	40.000 dB
Attenuation	100.000 kHz	100.000 kHz	100.000 kHz
Detector	MaxPeak	MaxPeak	MaxPeak
SweepCount	200	200	200
Filter	3 dB	3 dB	3 dB
Trace Mode	Max Hold	Max Hold	Max Hold
Sweeptype	FFT	FFT	FFT
Preamp	off	off	off
Stablemode	Trace	Trace	Trace
Stablevalue	0.30 dB	0.30 dB	0.30 dB
Run	127 / max. 150	150 / max. 150	104 / max.
Stable	5 / 5	2 / 5	5 / 5
Max Stable Difference	0.19 dB	0.20 dB	0.24 dB

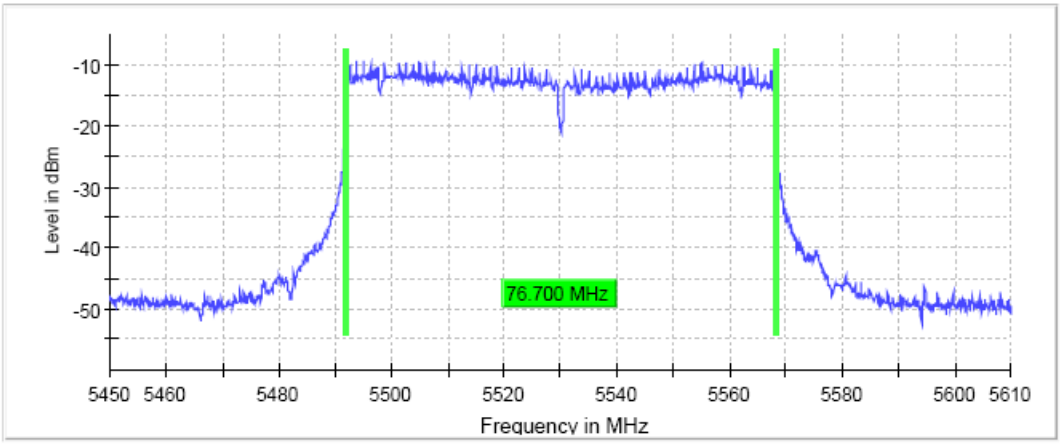
TEST RESULTS	ac mode (80 MHz)

Bandwidth: 80 MHz

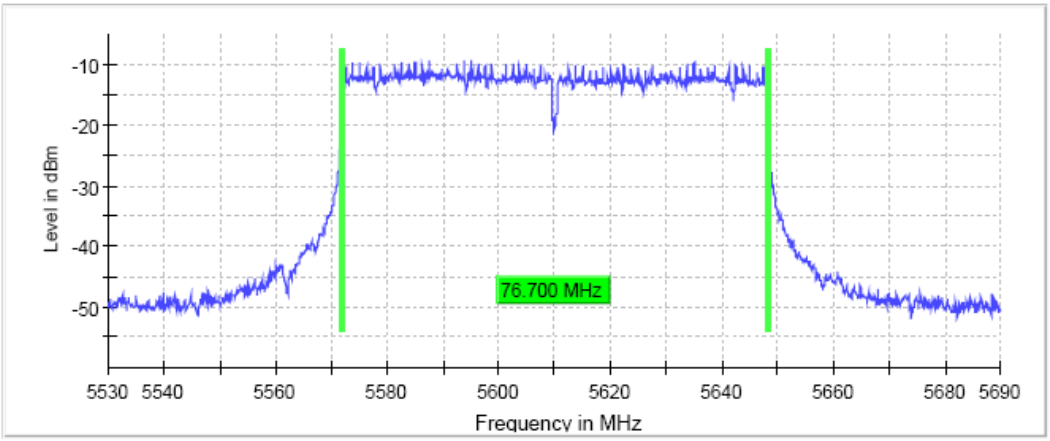
	Lowest frequency 5530 MHz	Middle frequency 5610 MHz	Highest frequency 5690 MHz
6dB bandwidth (MHz)	76.7	76.7	76.7
Measurement uncertainty (kHz)	<± 8.33		

TEST RESULTS (Cont.):	6 dB BANDWIDTH

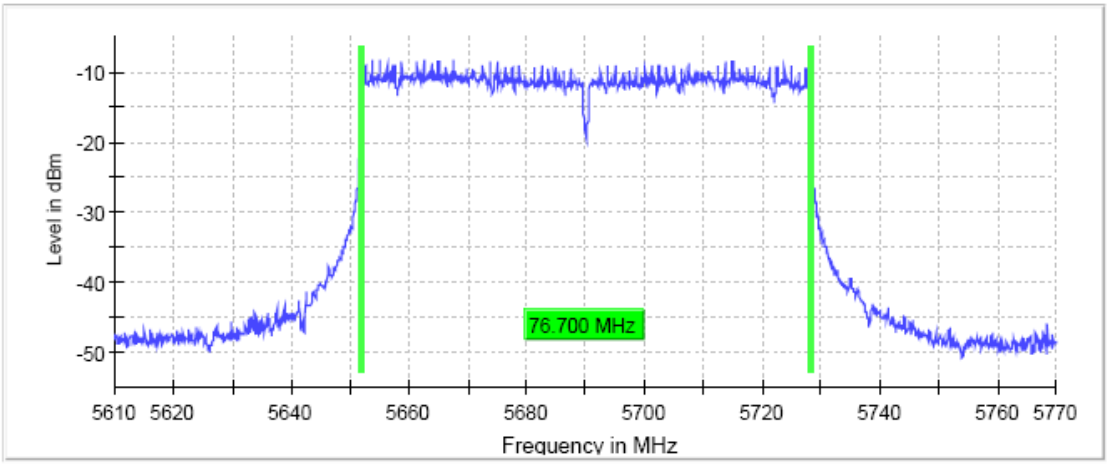
Lowest Channel



Middle Channel



Highest Channel



TEST RESULTS (Cont.)	

Measurement

Setting	Instrument Value	Instrument Value	Instrument Value
Start Frequency	5.45000 GHz	5.53000 GHz	5.61000 GHz
Stop Frequency	5.61000 GHz	5.69000 GHz	5.77000 GHz
Span	160.000 MHz	160.000 MHz	160.000 MHz
RBW	100.000 KHz	100.000 KHz	100.000 KHz
VBW	300.000 KHz	300.000 KHz	300.000 KHz
SweepPoints	1600	1600	1600
Sweeptime	189.620 µs	189.620 µs	189.620 µs
Reference Level	10.000 dBm	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	30.000 dB	30.000 dB
Detector	MaxPeak	MaxPeak	MaxPeak
SweepCount	200	200	200
Filter	3 dB	3 dB	3 dB
Trace Mode	Max Hold	Max Hold	Max Hold
Sweeptype	FFT	FFT	FFT
Preamp	off	off	off
Stablemode	Trace	Trace	Trace
Stablevalue	0.30 dB	0.30 dB	0.30 dB
Run	150 / max. 150	115 / max. 150	150 / max. 150
Stable	1 / 5	5 / 5	0 / 5
Max Stable Difference	0.17 dB	0.29 dB	0.35 dB

TEST D.3: POWER LIMITS. MAXIMUM OUTPUT POWER

LIMITS:	Product standard:	Part 15 Subpart C §15.407 and RSS-247
	Test standard:	Part 15 Subpart C §15.407(a) (1) (4) and RSS-247 6.2.1.1

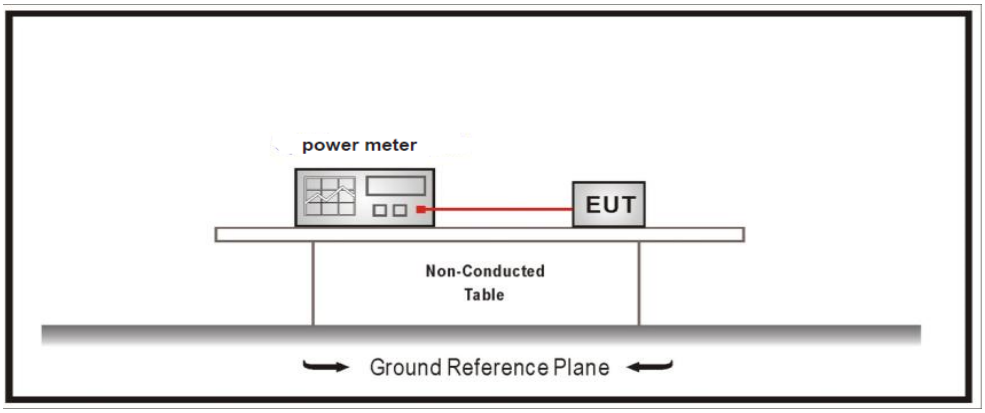
LIMITS

In band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

TEST SETUP	

Measured according to ANSI C63.10, Section 11.9.2.3.2 Method AVGPM-G

The EIRP power (dBm) is calculated by adding the declared maximum antenna gain to the measured conducted power



TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#01 (**a mode)**
TEST RESULTS:	PASS

Bandwidth: 20 MHz

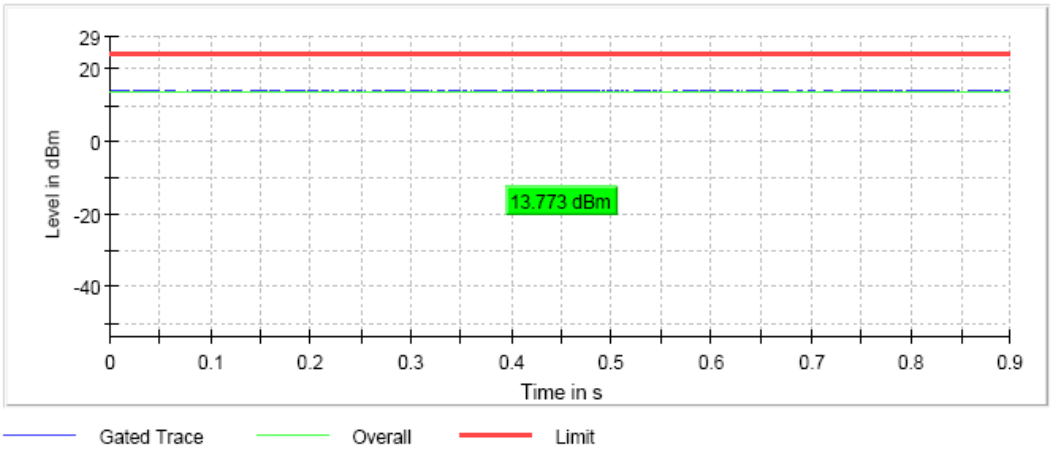
Maximum declared antenna gain: 4.5 dBi

	Lowest frequency 5500 MHz	Middle frequency 5600 MHz	Highest frequency 5700 MHz
Maximum conducted power (dBm)	13.8	13.9	14
Maximum EIRP power (dBm)	18.3	18.4	18.5
Measurement uncertainty (dB)	<±0.78		

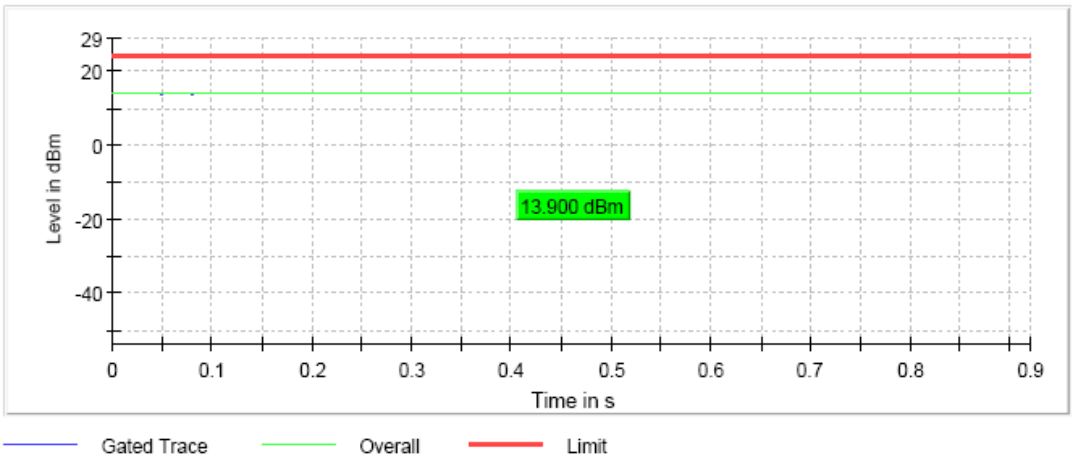
The maximum directional gain of the antenna is less than 6 dBi and therefore the maximum output power is not required to be reduced from the stated values.

TEST RESULTS (Cont.):	CONDUCTED OUTPUT POWER

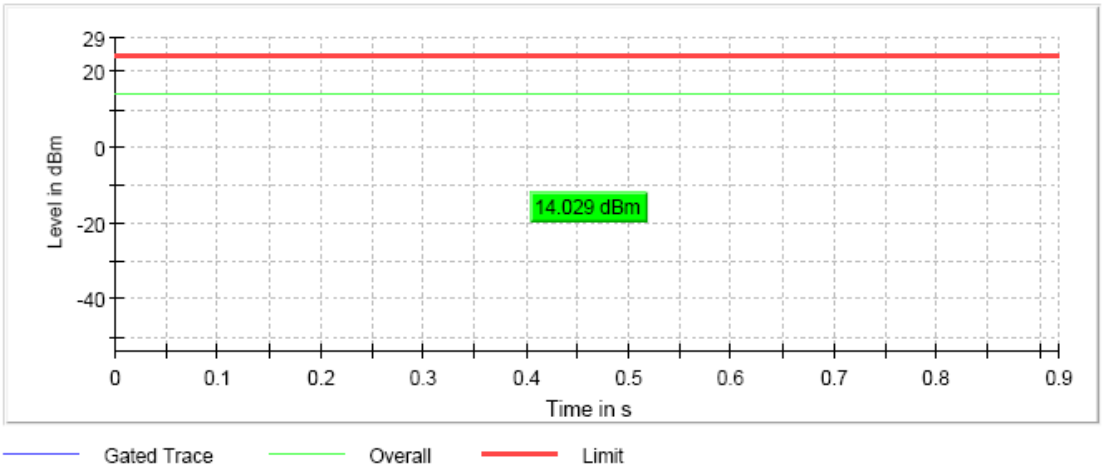
Lowest Channel



Middle Channel



Highest Channel



TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#02 **(n mode)**
TEST RESULTS:	PASS

Bandwidth: 20 MHz

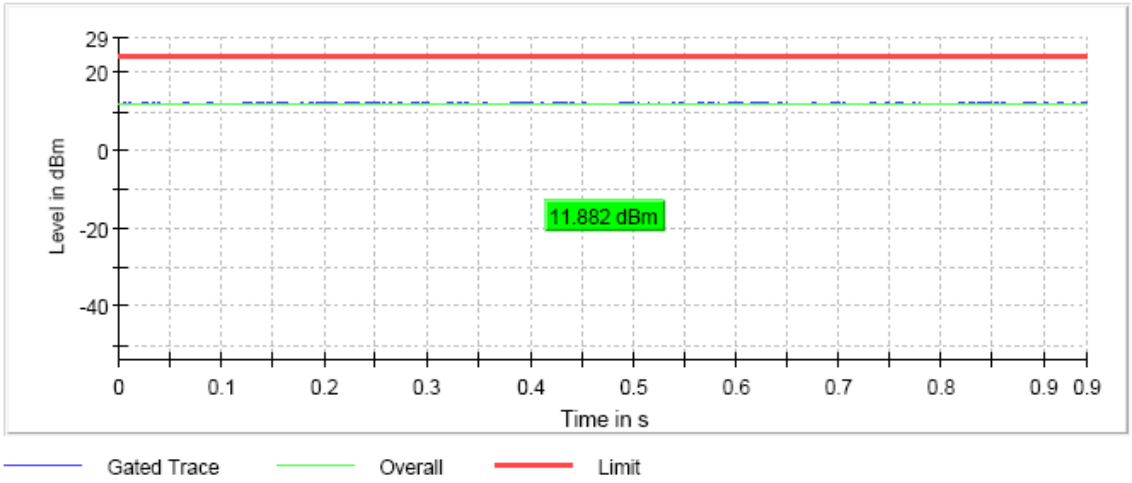
Maximum declared antenna gain: 4.5 dBi

	Lowest frequency 5500 MHz	Middle frequency 5600 MHz	Highest frequency 5700 MHz
Maximum conducted power (dBm)	11.9	12.3	12.9
Maximum EIRP power (dBm)	16.4	16.8	17.4
Measurement uncertainty (dB)	<±0.78		

The maximum directional gain of the antenna is less than 6 dBi and therefore the maximum output power is not required to be reduced from the stated values.

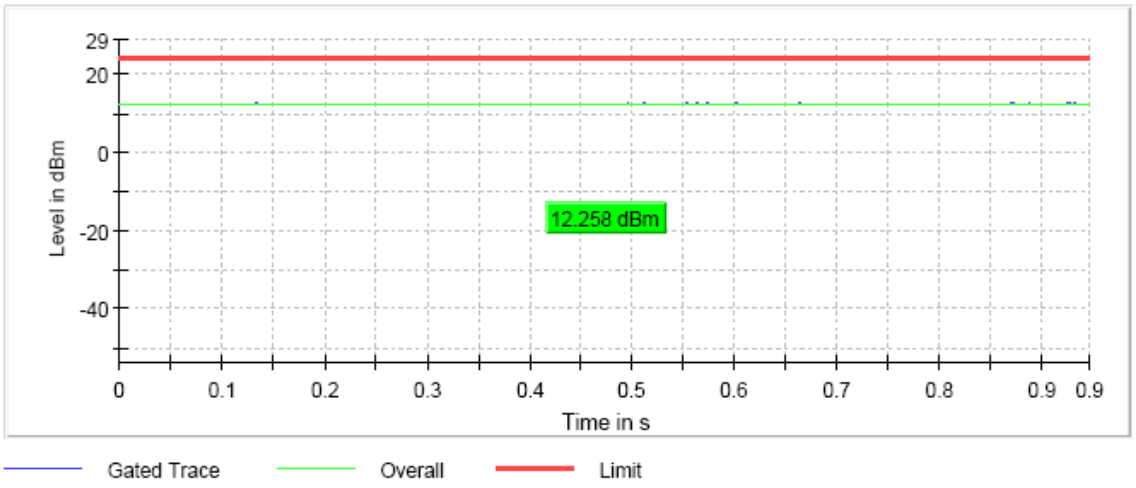
TEST RESULTS (Cont.):	**CONDUCTED OUTPUT POWER**

Lowest Channel

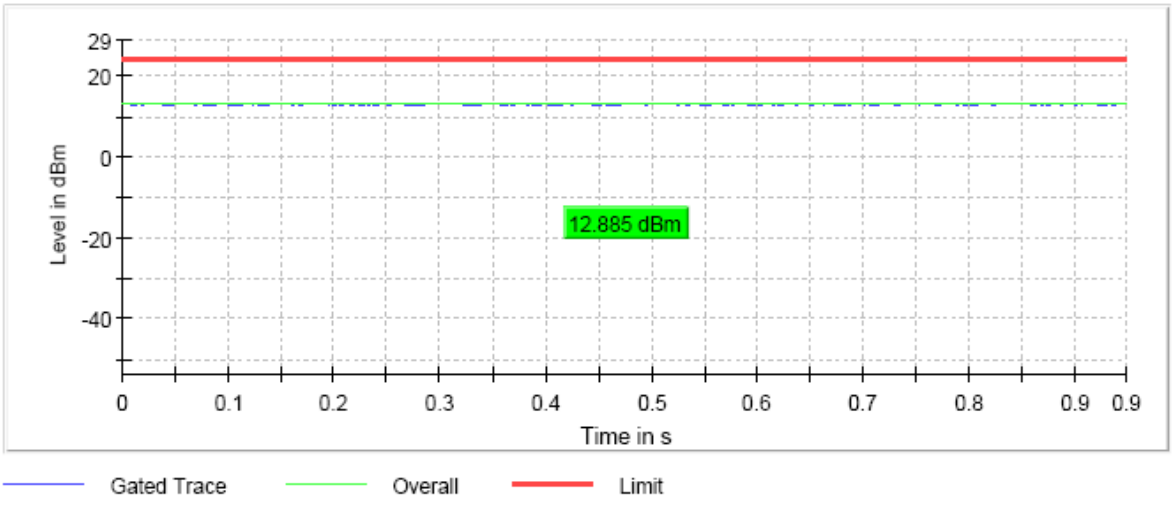


TEST RESULTS (Cont.)	

Middle Channel



Highest Channel



TEST RESULTS	n Mode (40 MHz)

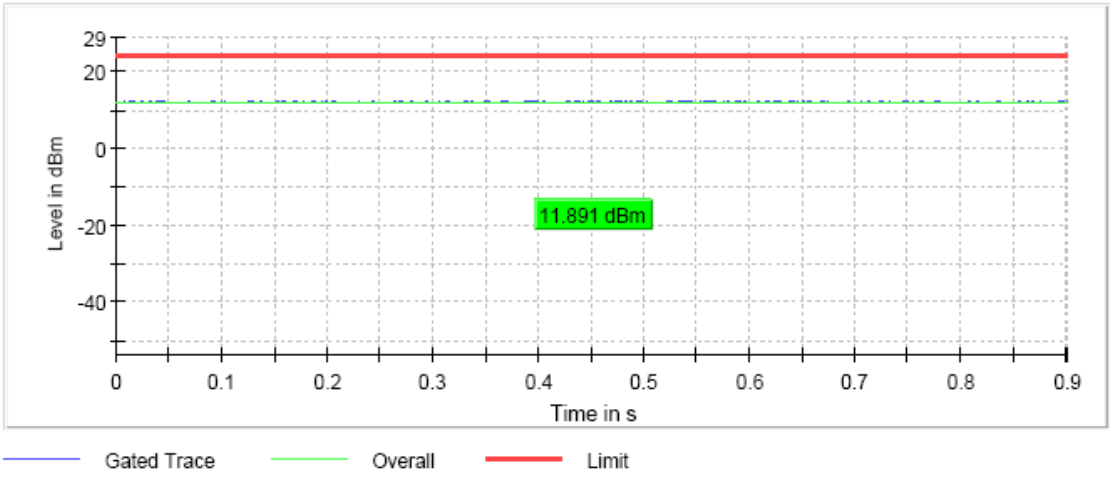
Maximum declared antenna gain: 4.5 dBi

	Lowest frequency 5510 MHz	Middle frequency 5590 MHz	Highest frequency 5710 MHz
Maximum conducted power (dBm)	11.9	12.3	13
Maximum EIRP power (dBm)	16.4	16.8	17.5
Measurement uncertainty (dB)	<±0.78		

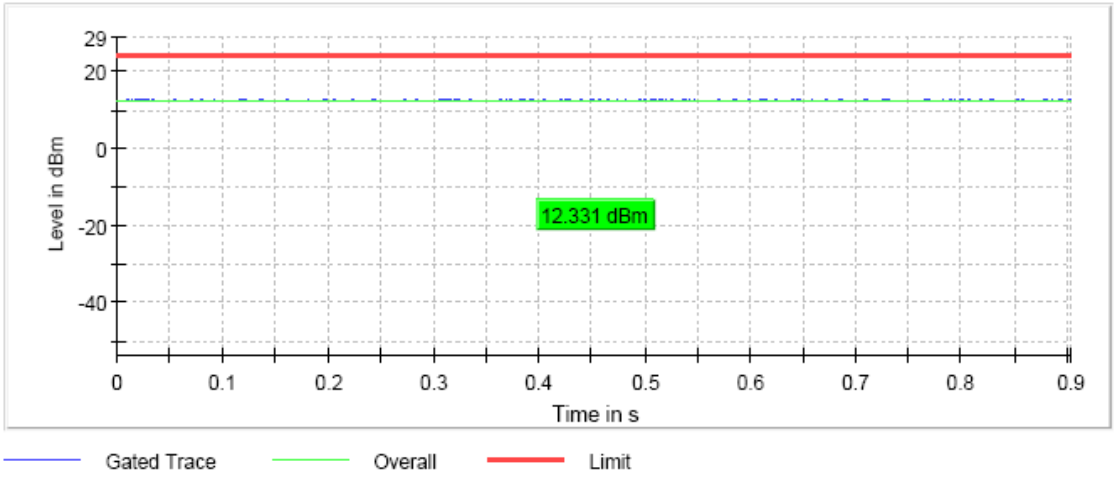
The maximum directional gain of the antenna is less than 6 dBi and therefore the maximum output power is not required to be reduced from the stated values.

TEST RESULTS (Cont.):	CONDUCTED OUTPUT POWER

Lowest Channel

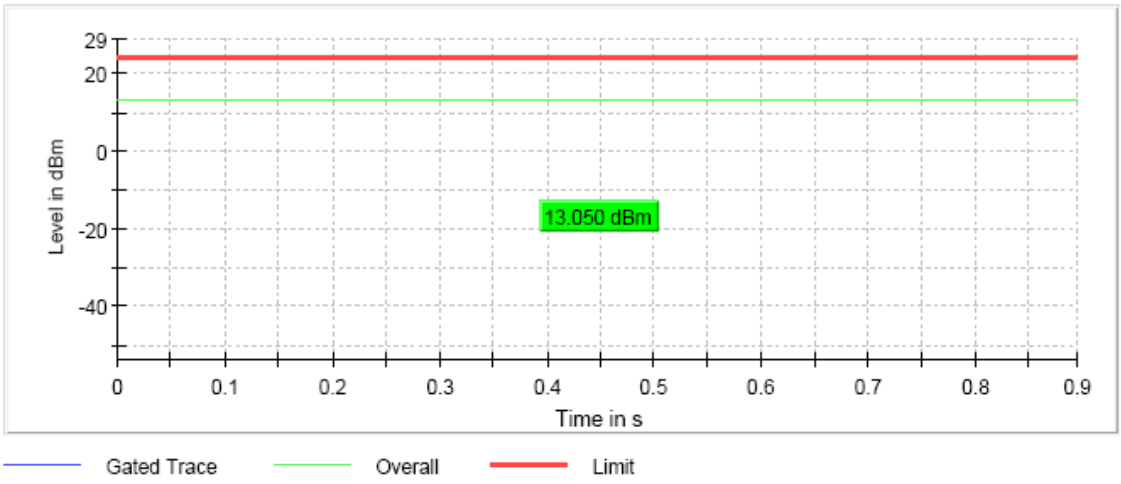


Middle Channel



TEST RESULTS (Cont.)	

Highest Channel



TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#03 **(ac mode)**
TEST RESULTS:	PASS

Bandwidth: 20 MHz

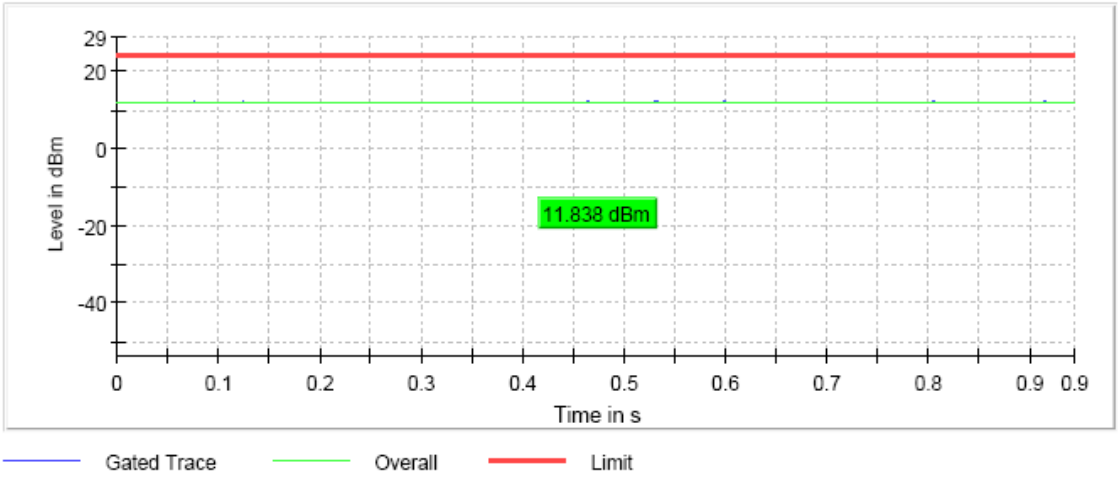
Maximum declared antenna gain: 4.5 dBi

	Lowest frequency 5500 MHz	Middle frequency 5600 MHz	Highest frequency 5700 MHz
Maximum conducted power (dBm)	11.8	12.2	12.9
Maximum EIRP power (dBm)	16.3	16.7	17.4
Measurement uncertainty (dB)	<±0.78		

The maximum directional gain of the antenna is less than 6 dBi and therefore the maximum output power is not required to be reduced from the stated values.

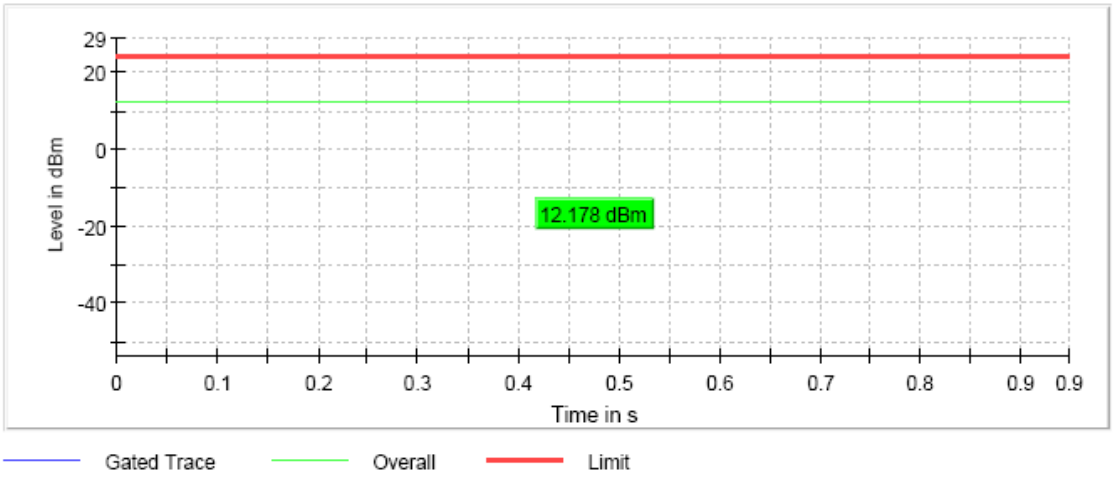
TEST RESULTS (Cont.):	**CONDUCTED OUTPUT POWER**

Lowest Channel

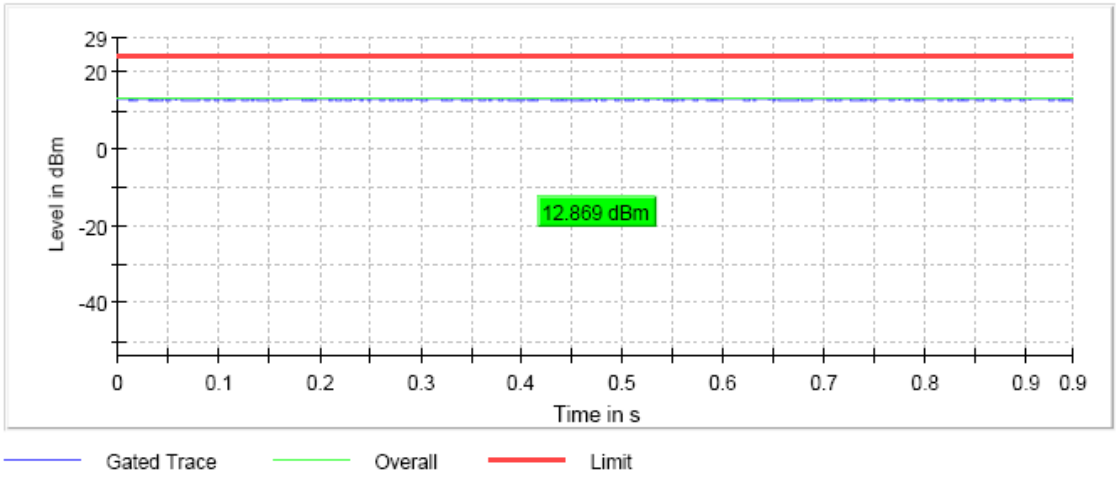


TEST RESULTS (Cont.)	

Middle Channel



Highest Channel



TEST RESULTS	ac mode (40 MHz)

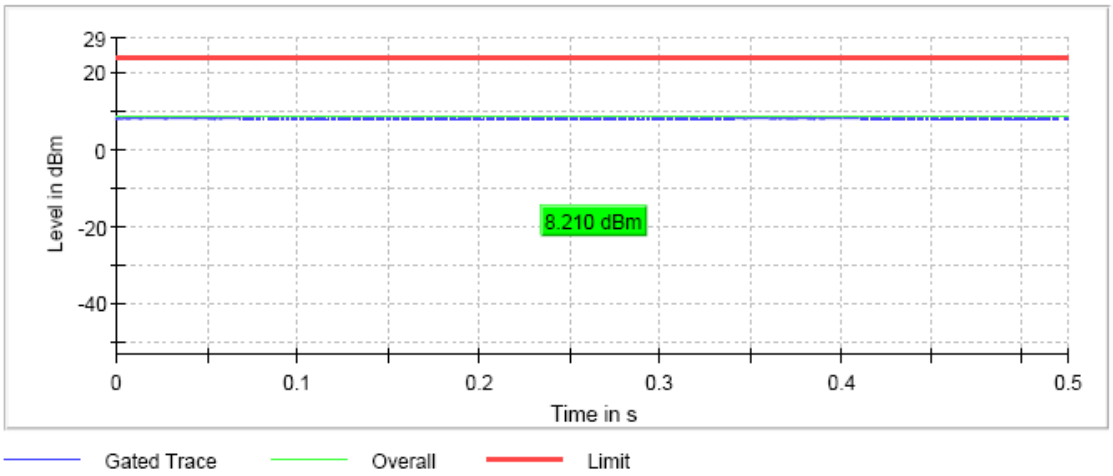
Maximum declared antenna gain: 4.5 dBi

	Lowest frequency 5510 MHz	Middle frequency 5590 MHz	Highest frequency 5710 MHz
Maximum conducted power (dBm)	8.2	8.6	9.4
Maximum EIRP power (dBm)	12.7	13.1	13.9
Measurement uncertainty (dB)	<±0.78		

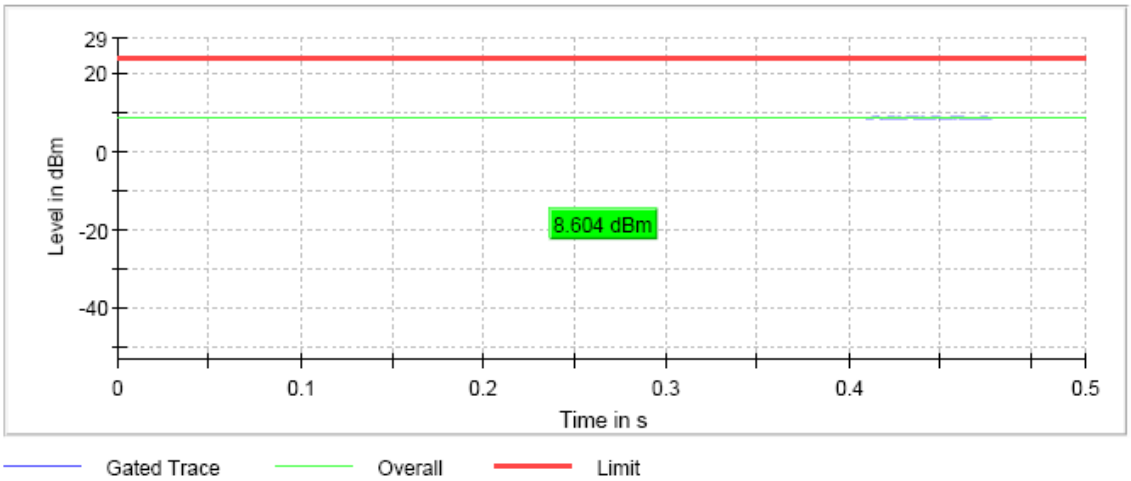
The maximum directional gain of the antenna is less than 6 dBi and therefore the maximum output power is not required to be reduced from the stated values.

TEST RESULTS (Cont.):	CONDUCTED OUTPUT POWER

Lowest Channel

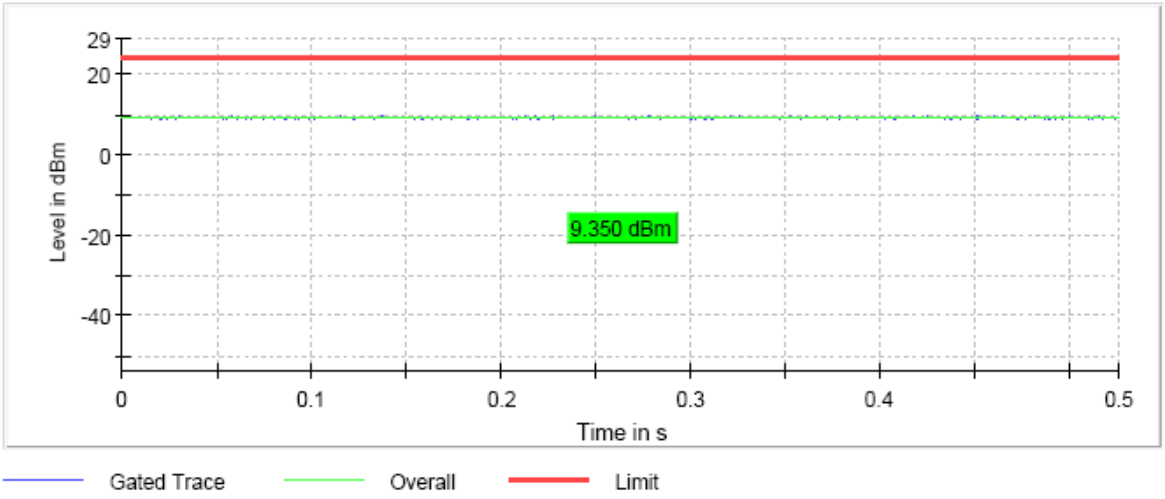


Middle Channel



TEST RESULTS (Cont.)	

Highest Channel



TEST RESULTS	ac mode (80 MHz)

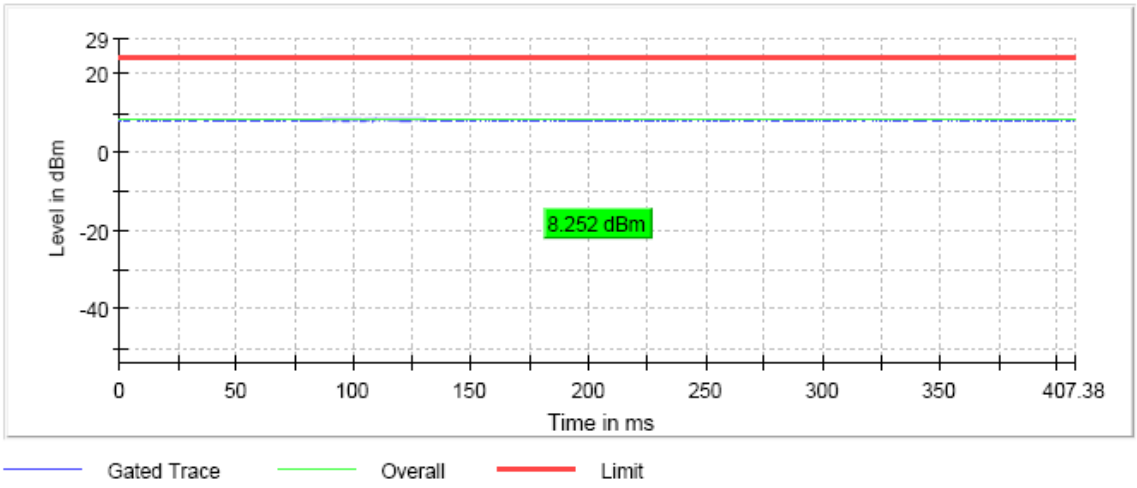
Maximum declared antenna gain: 4.5 dBi

	Lowest frequency 5530 MHz	Middle frequency 5610 MHz	Highest frequency 5690 MHz
Maximum conducted power (dBm)	8.3	8.6	9.4
Maximum EIRP power (dBm)	12.8	13.1	13.9
Measurement uncertainty (dB)	<±0.78		

The maximum directional gain of the antenna is less than 6 dBi and therefore the maximum output power is not required to be reduced from the stated values.

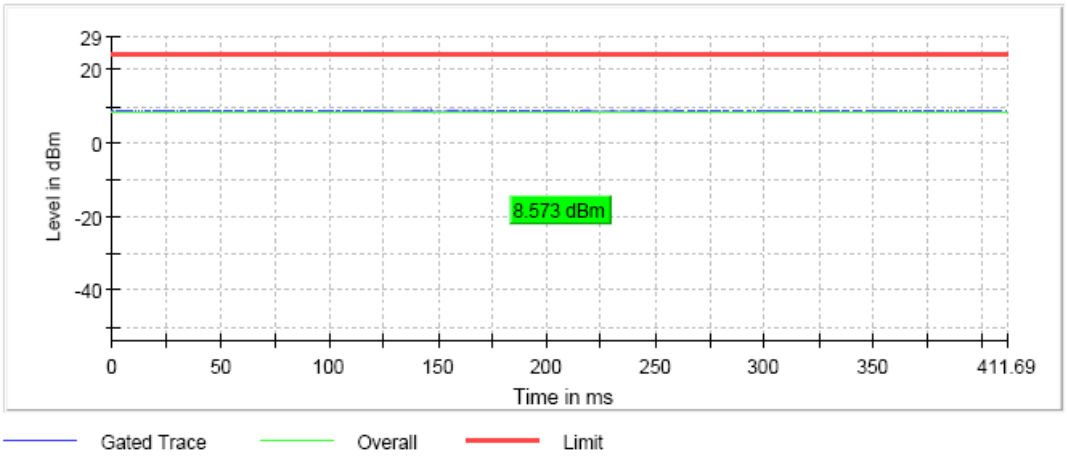
TEST RESULTS (Cont.):	CONDUCTED OUTPUT POWER

Lowest Channel

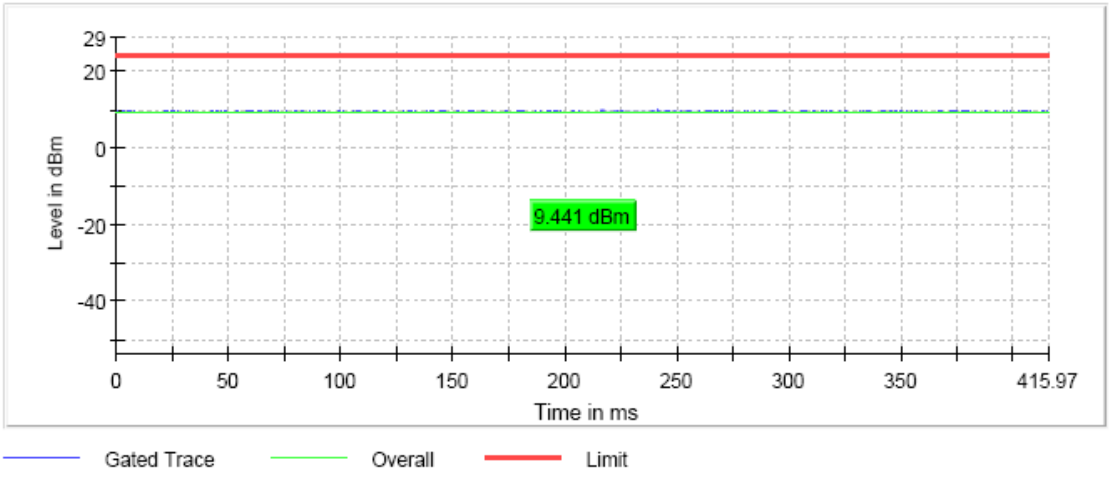


TEST RESULTS (Cont.)	

Middle Channel



Highest Channel



TEST D.4: POWER SPECTRAL DENSITY

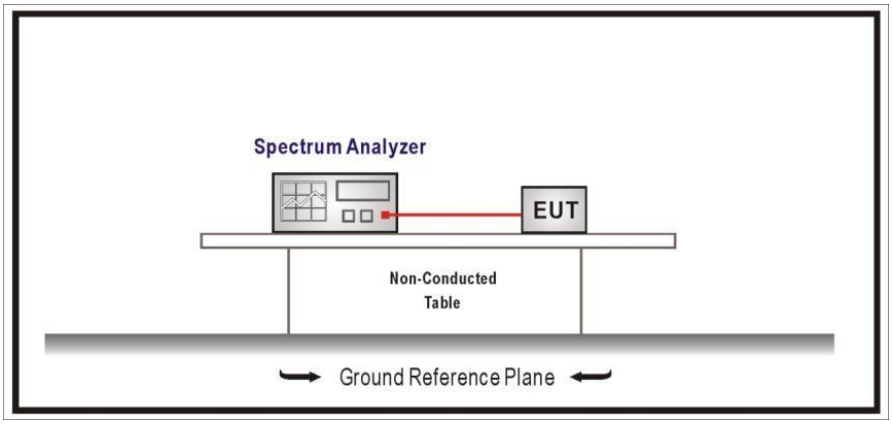
LIMITS:	Product standard:	Part 15 Subpart C §15.407 and RSS-247
	Test standard:	Part 15 Subpart C §15.407(a) (1) (5) and RSS-247 6.2.1.1

LIMITS

In the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

TEST SETUP	

For all modes, the maximum power spectral density level in the fundamental emission was measured using the method according to point F) (Method SA-1) of Guidance 789033 D02 General UNII Test Procedures New Rules v01.



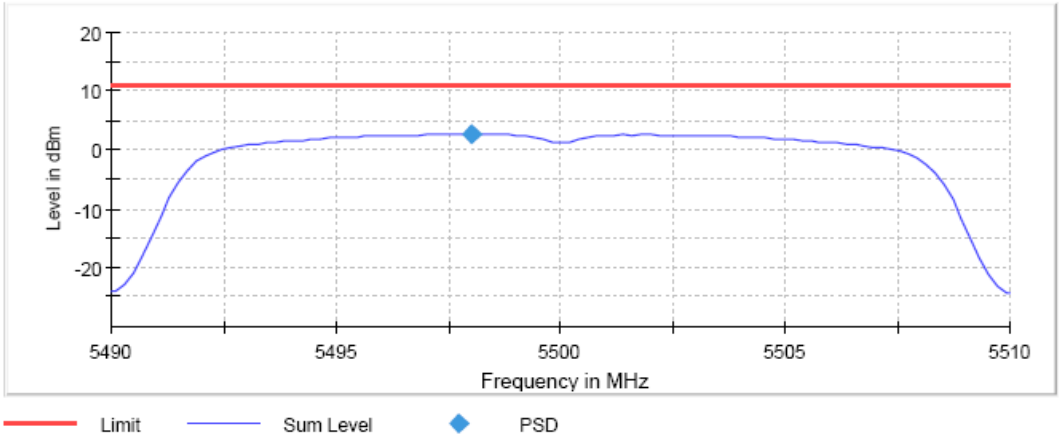
TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#01 **(a mode)**
TEST RESULTS:	PASS

Bandwidth: 20 MHz

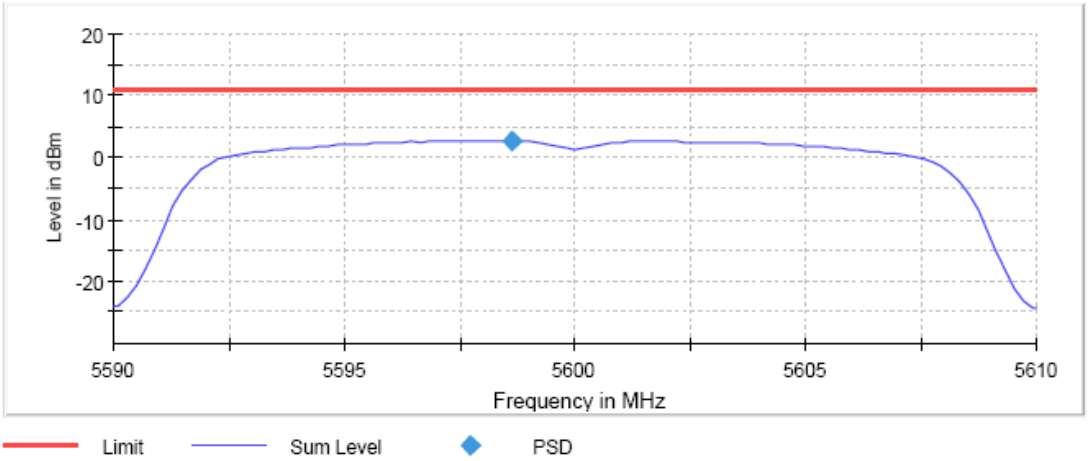
	Lowest frequency 5500 MHz	Middle frequency 5600 MHz	Highest frequency 5700 MHz
Power spectral density (dBm)	2.606	2.668	2.838
Measurement uncertainty (dB)	<±0.78		

TEST RESULTS (Cont.):	

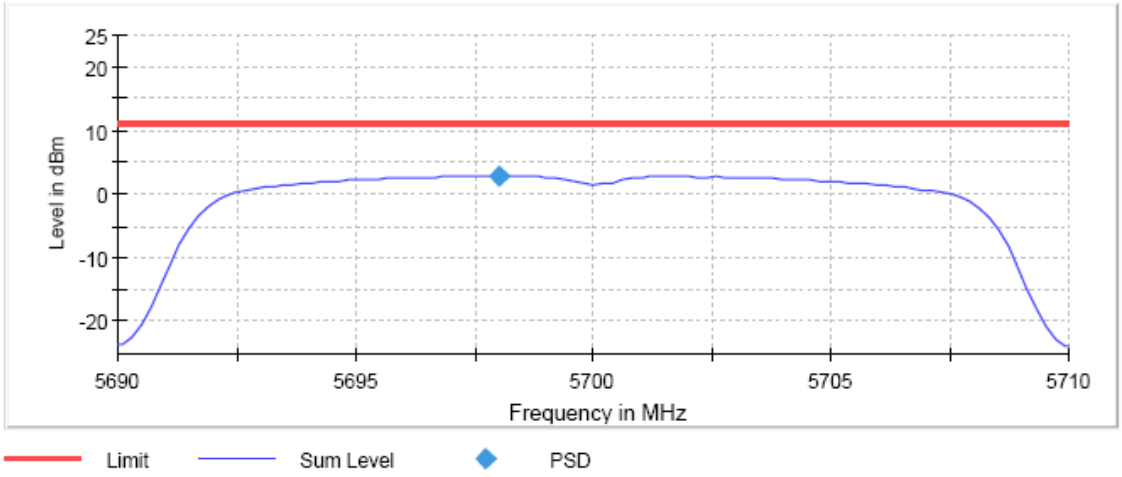
Low Channel



Middle Channel



High Channel



TEST RESULTS (Cont.):	

Measurement

Setting	Instrument Value	Instrument Value	Instrument Value
Start Frequency	5.49000 GHz	5.59000 GHz	5.69000 GHz
Stop Frequency	5.51000 GHz	5.61000 GHz	5.71000 GHz
Span	20.000 MHz	20.000 MHz	20.000 MHz
RBW	1.000 MHz	1.000 MHz	1.000 MHz
VBW	3.000 MHz	3.000 MHz	3.000 MHz
SweepPoints	101	101	101
Sweeptime	2.020 s	2.020 s	2.020 s
Reference Level	20.000 dBm	20.000 dBm	20.000 dBm
Attenuation	40.000 dB	40.000 dB	40.000 dB
Detector	RMS	RMS	RMS
SweepCount	3	3	3
Filter	3 dB	3 dB	3 dB
Trace Mode	Max Hold	Max Hold	Max Hold
Sweeptype	Sweep	Sweep	Sweep
Preamp	off	off	off
Stablemode	Trace	Trace	Trace
Stablevalue	0.30 dB	0.30 dB	0.30 dB
Run	4 / max. 150	4 / max. 150	4 / max. 150
Stable	3 / 3	3 / 3	3 / 3
Max Stable	0.06 dB	0.06 dB	0.05 dB

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

Bandwidth: 20 MHz

	Lowest frequency 5500 MHz	Middle frequency 5600 MHz	Highest frequency 5700 MHz
Power spectral density (dBm)	-0.361	0.142	1.046
Measurement uncertainty (dB)	<±0.78		

TEST RESULTS (Cont.):	

Low Channel