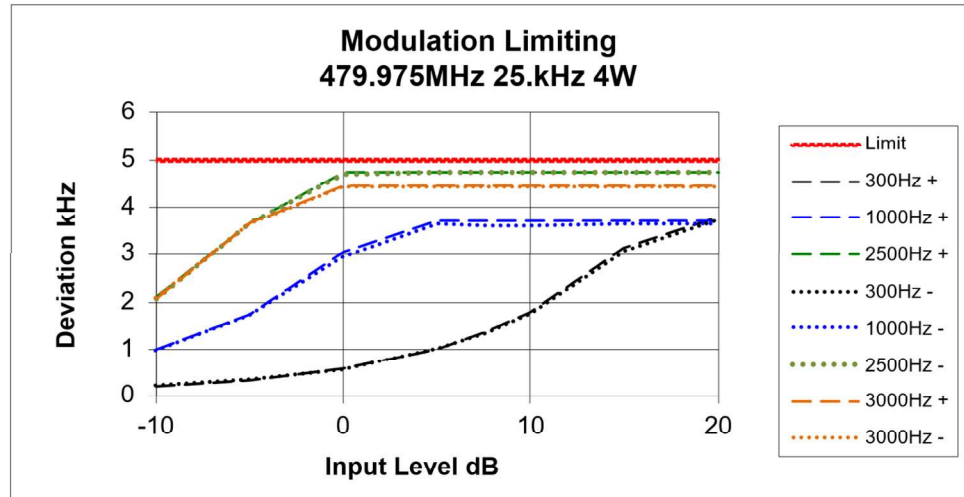


Transmitter Modulation Limiting

SPECIFICATION: FCC 47 CFR 2.1047 (b)

Tx FREQUENCY: 479.975 MHz

25 kHz Channel Spacing



TRANSMITTER OCCUPIED (99%) BANDWIDTH

SPECIFICATION: FCC 47 CFR 2.1046
RSS-119 5.5

GUIDE: ANSI C63.26 5.4.4

MEASUREMENT PROCEDURE:

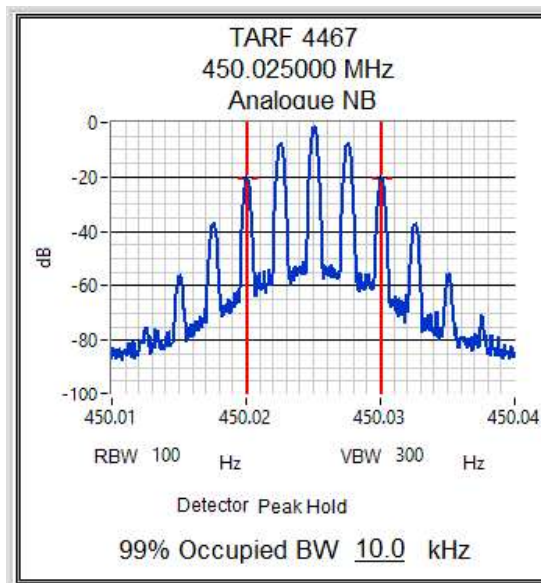
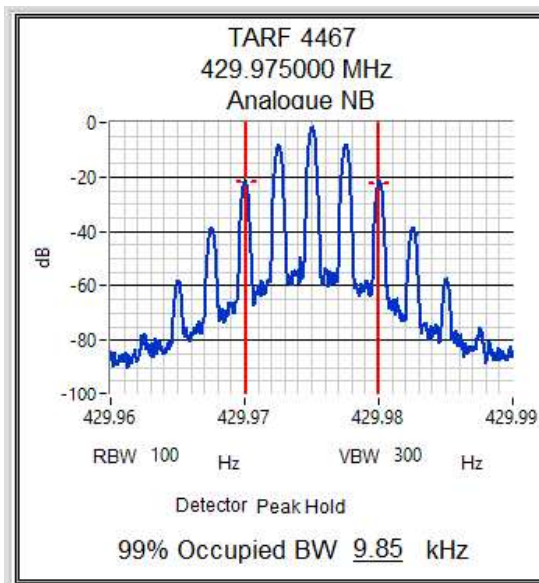
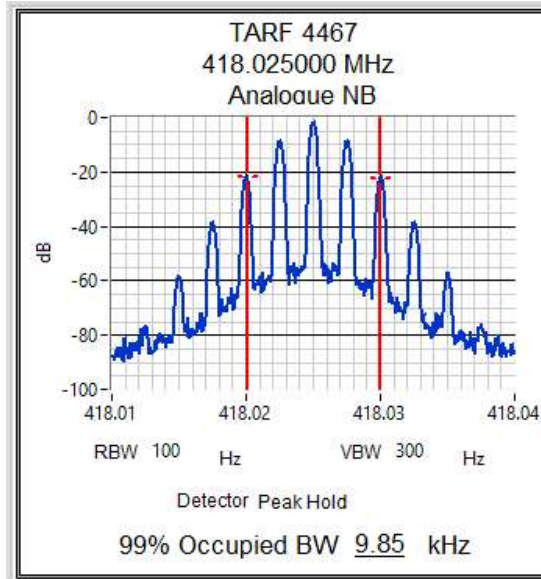
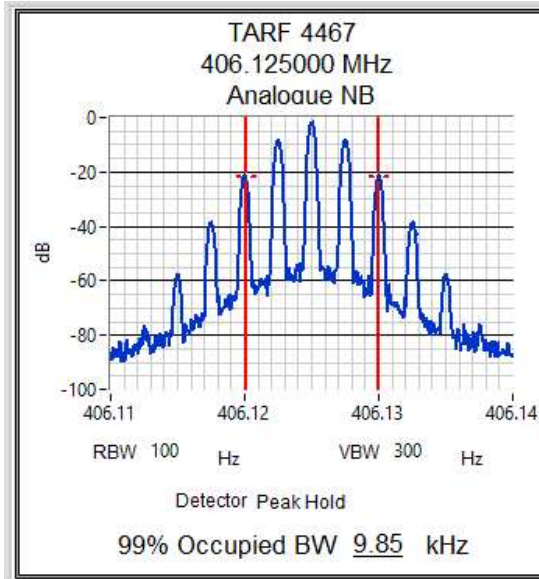
1. Refer Annex A for Equipment Set up.
2. For analogue measurements: The EUT was modulated by a 2500 Hz tone at an input level 16 dB above a level that produced 50% deviation. The input level was established at the frequency of maximum response of the audio modulating circuit.
For Data measurements: The EUT was modulated with an internally generated pseudo random bit sequence at the appropriate Baud rates.
3. The Occupied Bandwidth was measured on the Spectrum Analyser, with bandwidth settings as follows.
Resolution Bandwidth = 100 Hz, Video Bandwidth = 300 Hz

MEASUREMENT RESULTS:

	Bandwidths (kHz)		
Channel Frequency (MHz)	Analogue NB	Analogue WB	DMR
406.125 MHz	9.85	14.9	7.35
418.025 MHz	9.85	14.9	7.40
429.975 MHz	9.85	14.9	7.40
450.025 MHz	10.0	15.1	7.50
460.025 MHz	9.90	15.0	7.50
469.975 MHz	9.95	15.1	7.40
479.975 MHz	10.0	15.1	7.35
<u>Limit</u> Authorized Bandwidth 47 CFR 90.209 RSS 119 5.5	11.25	20.0	11.25
Necessary BW used in emission designator	11.0	16.0	8.0
Result	Pass	Pass	Pass

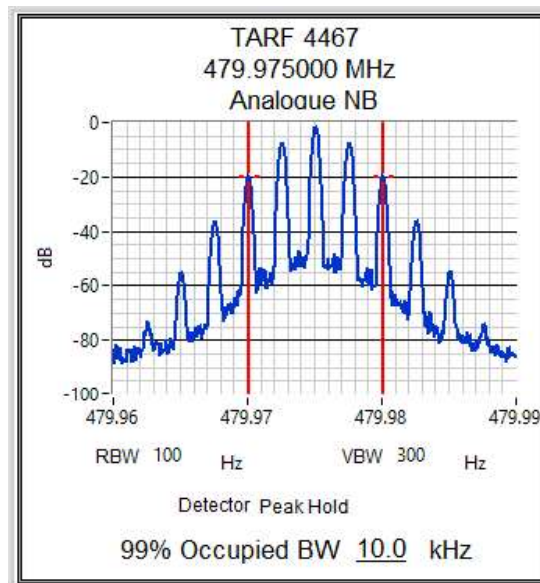
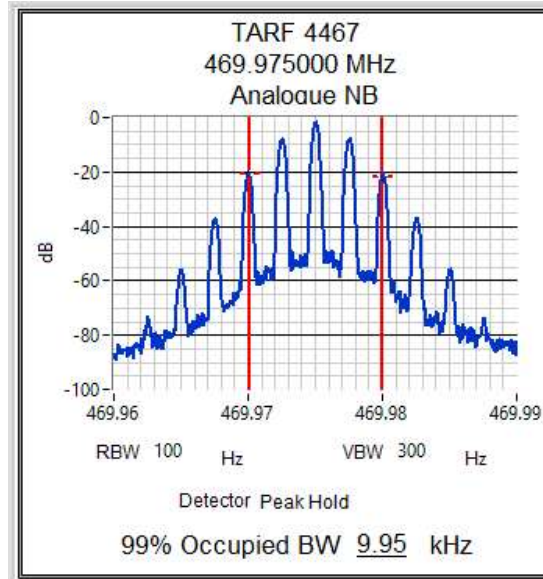
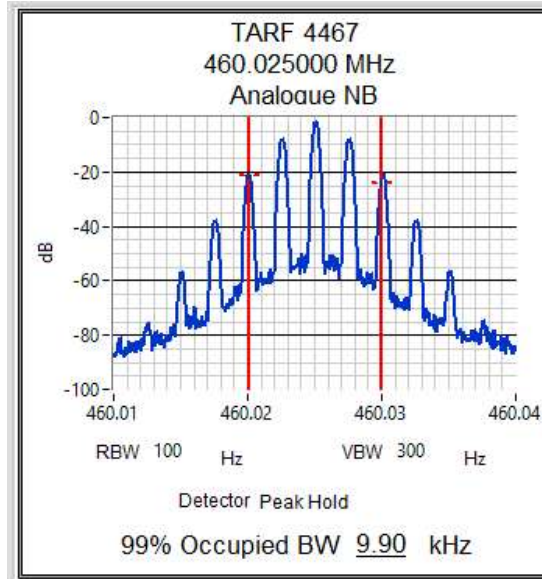
Transmitter Occupied (99%) Bandwidth

Channel 1-4 4 W 12.5 kHz channel spacing Analogue Modulation



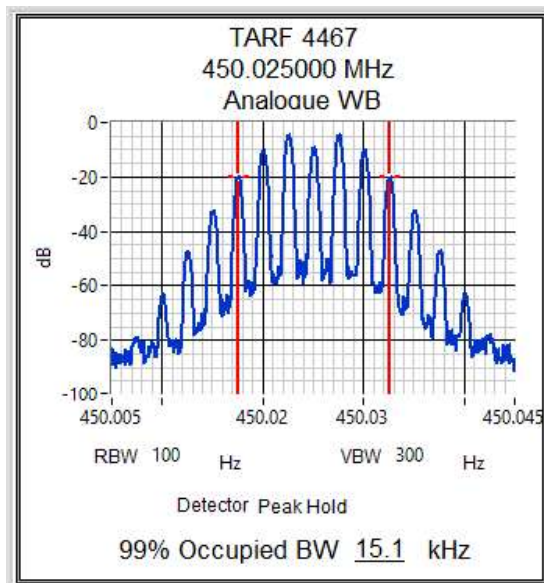
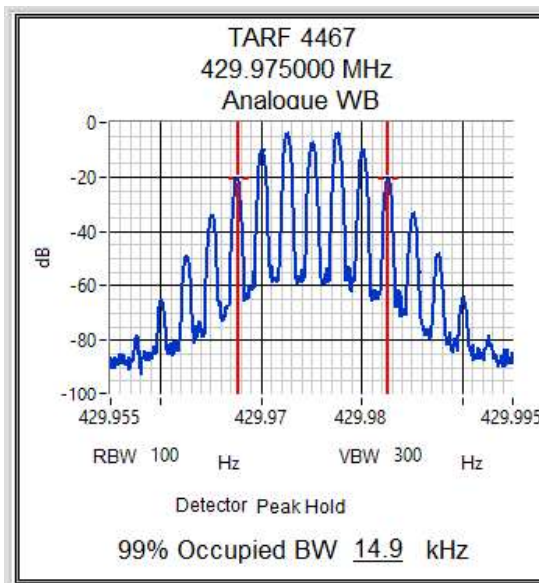
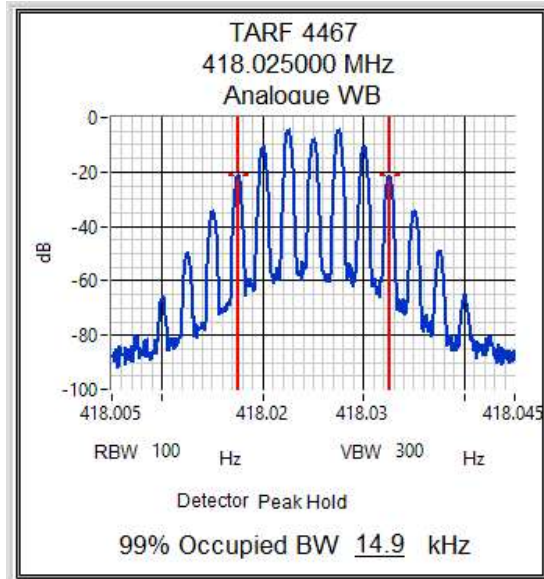
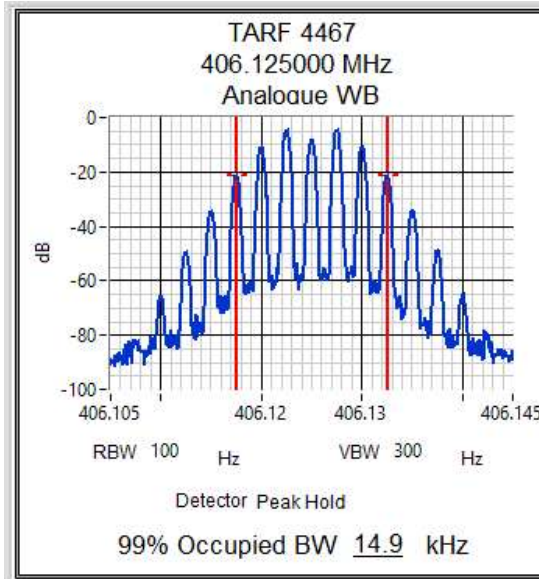
Transmitter Occupied (99%) Bandwidth

Channel 5-7 4 W 12.5 kHz channel spacing Analogue Modulation



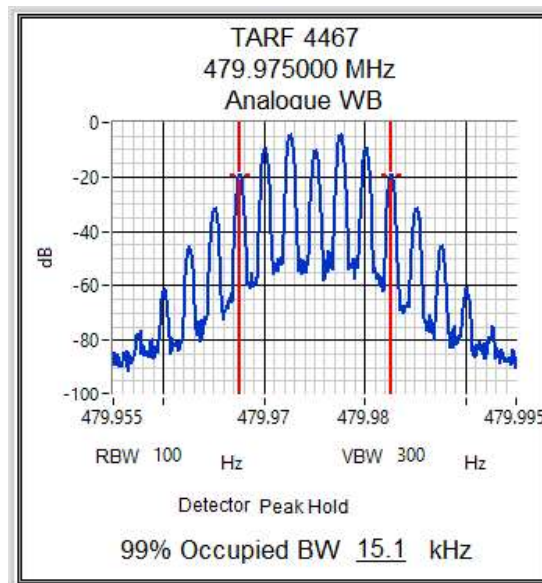
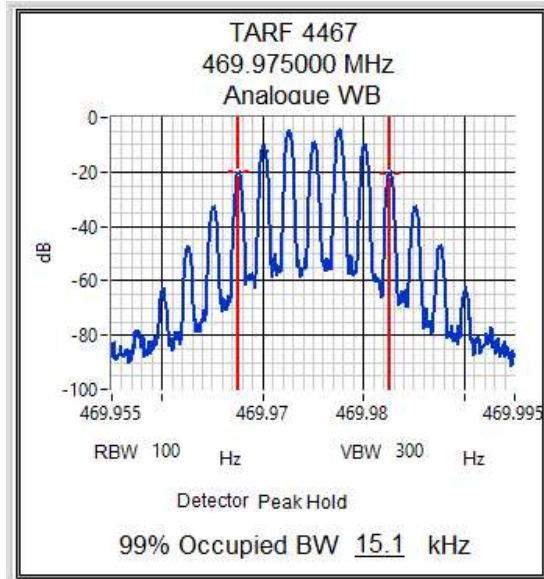
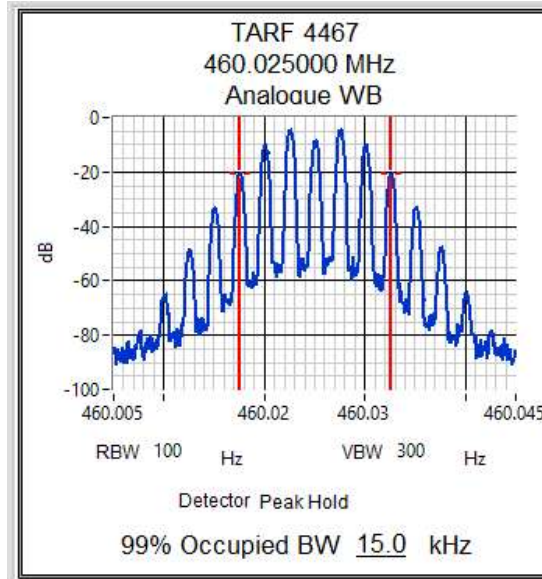
Transmitter Occupied (99%) Bandwidth

Channel 1-4 4 W 25.0 kHz channel spacing Analogue Modulation



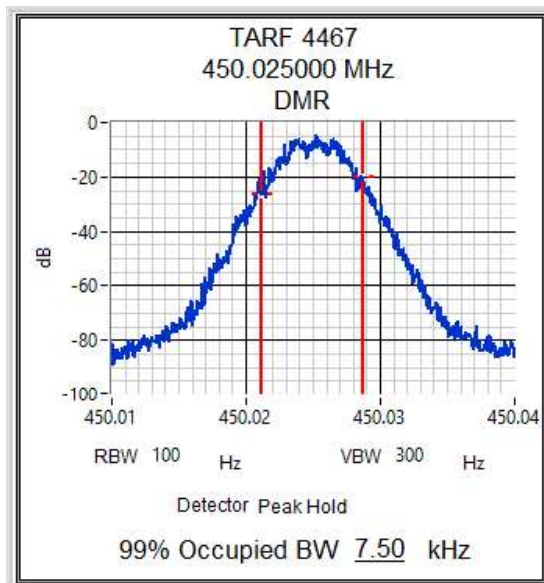
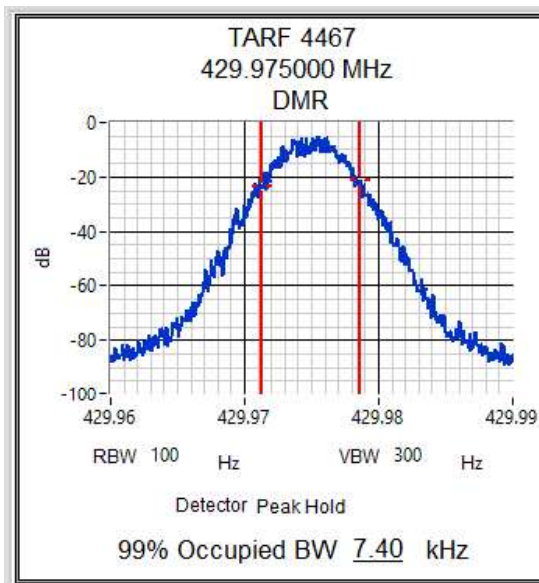
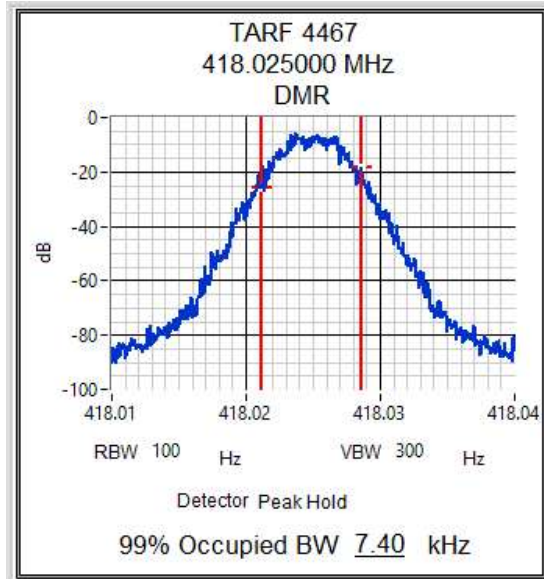
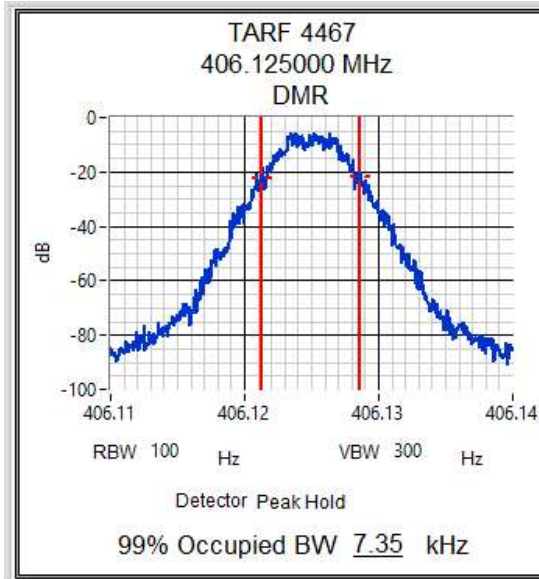
Transmitter Occupied (99%) Bandwidth

Channel 5-7 4 W 25.0 kHz channel spacing Analogue Modulation



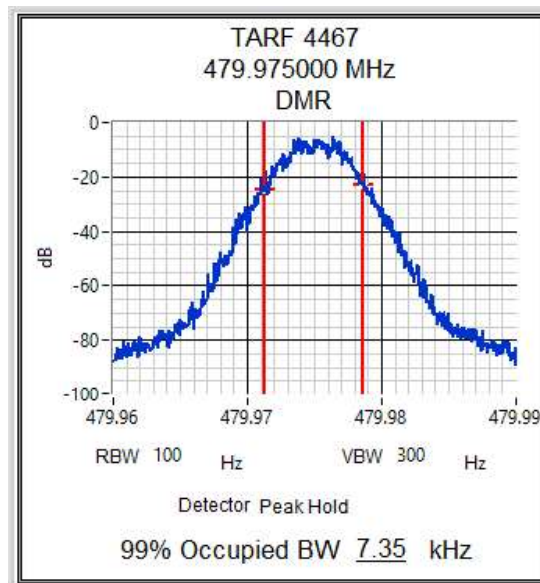
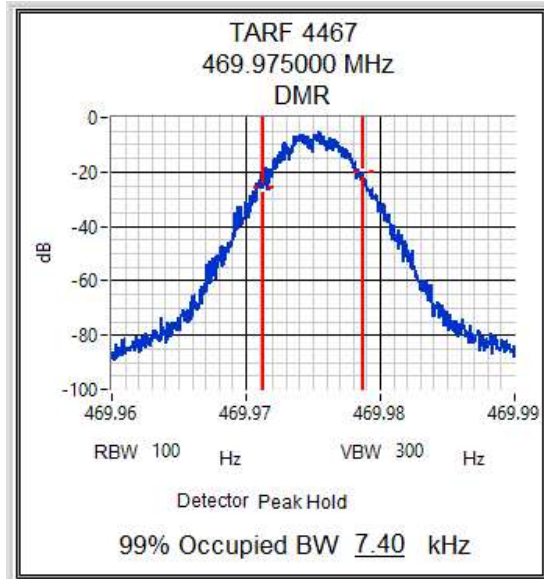
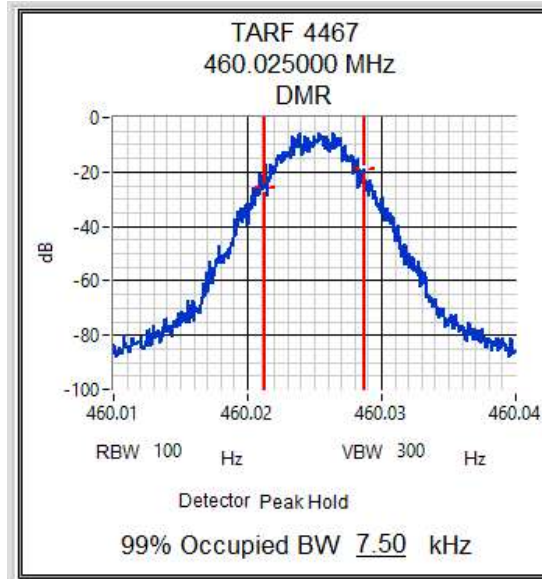
Transmitter Occupied (99%) Bandwidth

Channel 1-4 4 W 12.5 kHz channel spacing DMR Modulation



Transmitter Occupied (99%) Bandwidth

Channel 5-7 4 W 12.5 kHz channel spacing DMR Modulation



TRANSMITTER SPECTRUM MASKS

SPECIFICATION: FCC 47 CFR 2.1049 (c) RSS-119 5.5

GUIDE: ANSI C63.26.5.7.3

MEASUREMENT PROCEDURE:

1. Refer Annex A for Equipment Set up.
2. For analogue measurements: The EUT was modulated by a 2500 Hz tone at an input level 16 dB above a level that produced 50% deviation. The input level was established at the frequency of maximum response of the audio modulating circuit.
For Data measurements: The EUT was modulated with an internally generated pseudo random bit sequence at the appropriate Baud rates.
3. The spectrum mask was measured on the Spectrum Analyser, with bandwidth settings as follows.
Emission Mask D – Resolution Bandwidth = 100 Hz, Video Bandwidth = 1 kHz
Emission Mask B – Resolution Bandwidth = 300 Hz, Video Bandwidth = 3 kHz

MEASUREMENT RESULTS:

See the plots on the following pages.

MEASUREMENT UNCERTAINTY: 95% ± 0.65 dB

LIMIT CLAUSE: FCC 47 CFR 90.210 RSS-119 5.5

EMISSION MASKS

Emission Mask D	12.5 kHz Channel Spacing	Analogue NB and DMR
Emission Mask B	25.0 kHz Channel Spacing	Analogue WB

DATA SPEED

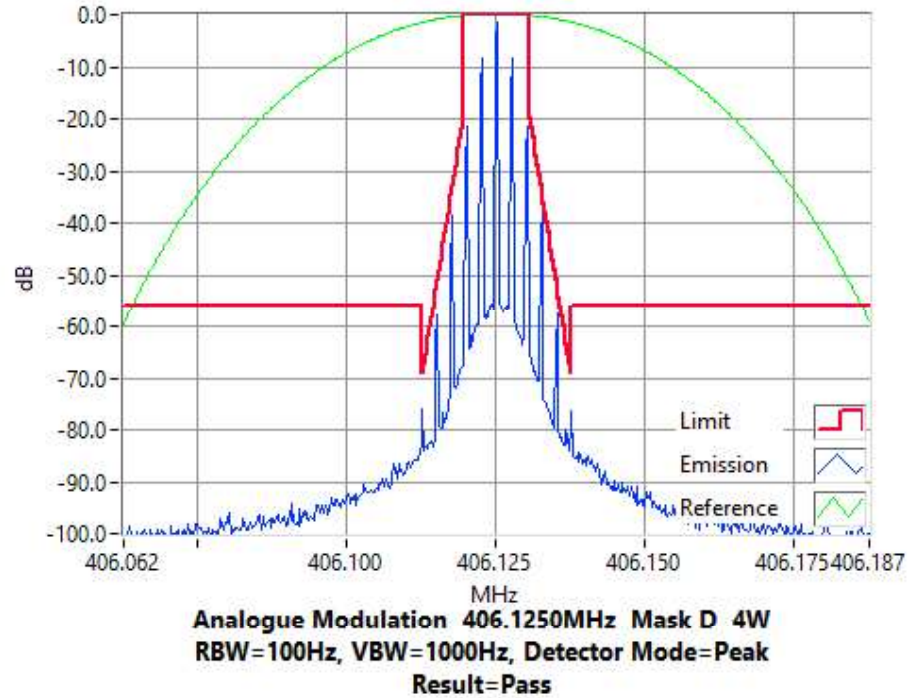
Digital Voice/Data	12.5 kHz Channel Spacing	9600 bps & 12000 bps
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Transmitter Spectrum Masks

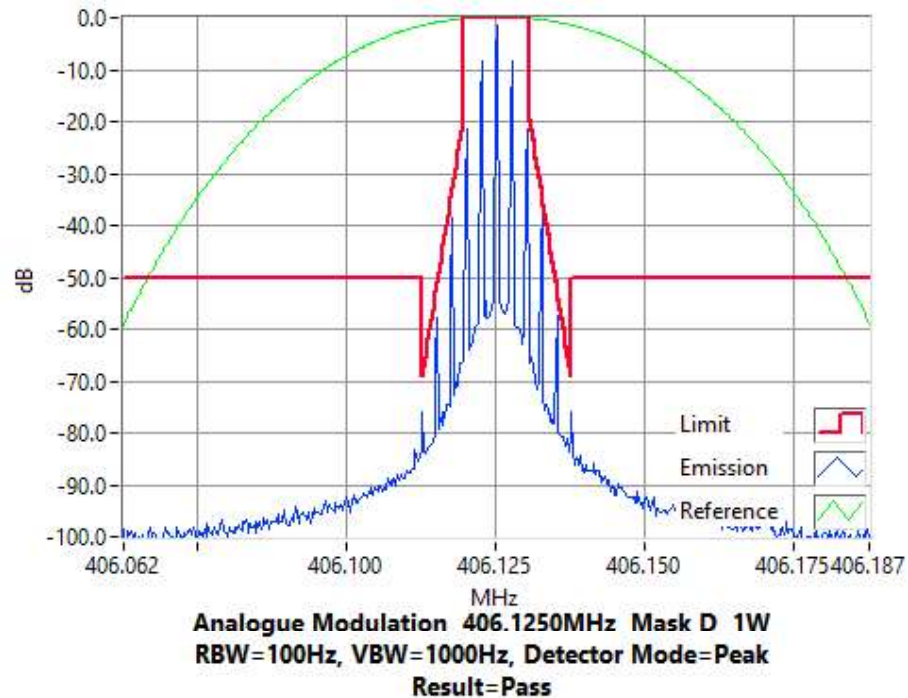
ANALOGUE VOICE

SPECIFICATION: FCC 47 CFR 2.1049 (c) RSS-119 5.5

Tx FREQUENCY: 406.125 MHz 4 W 12.5 kHz Channel Spacing



Tx FREQUENCY: 406.125 MHz 1 W 12.5 kHz Channel Spacing

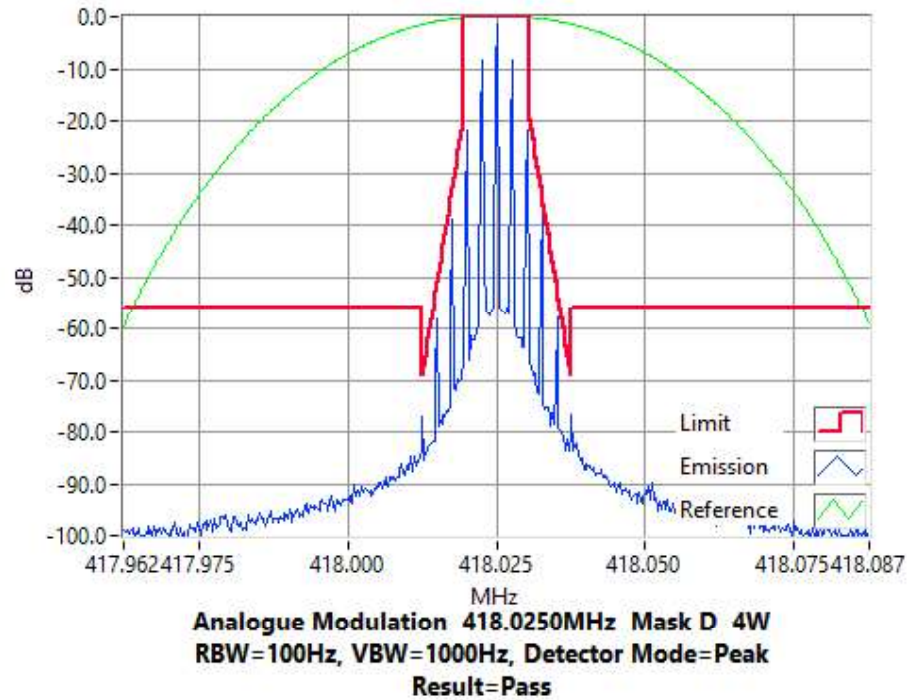


Transmitter Spectrum Masks

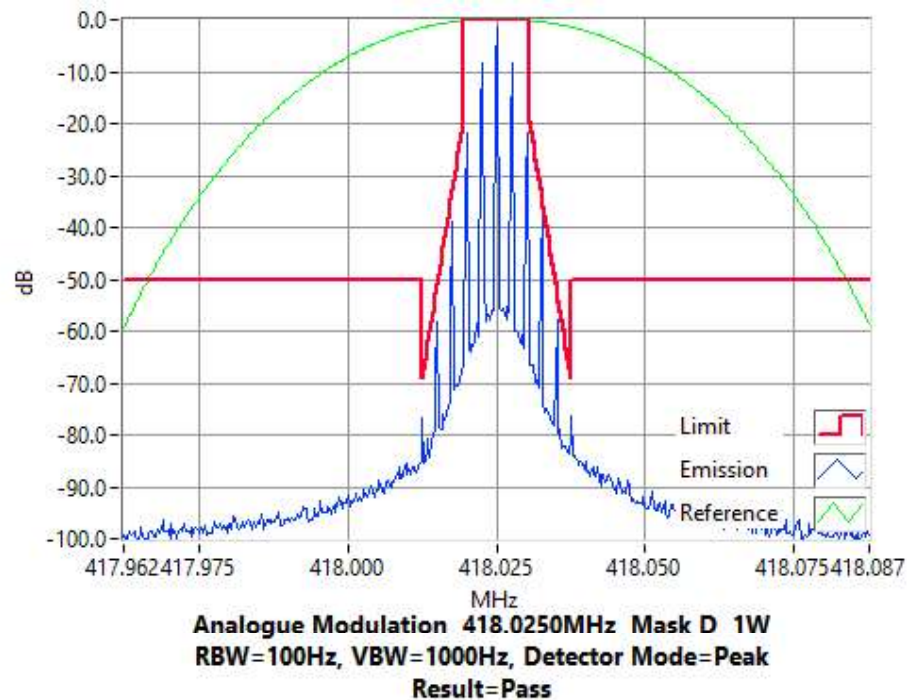
ANALOGUE VOICE

SPECIFICATION: FCC 47 CFR 2.1049 (c) RSS-119 5.5

Tx FREQUENCY: 418.025 MHz 4 W 12.5 kHz Channel Spacing



Tx FREQUENCY: 418.025 MHz 1 W 12.5 kHz Channel Spacing

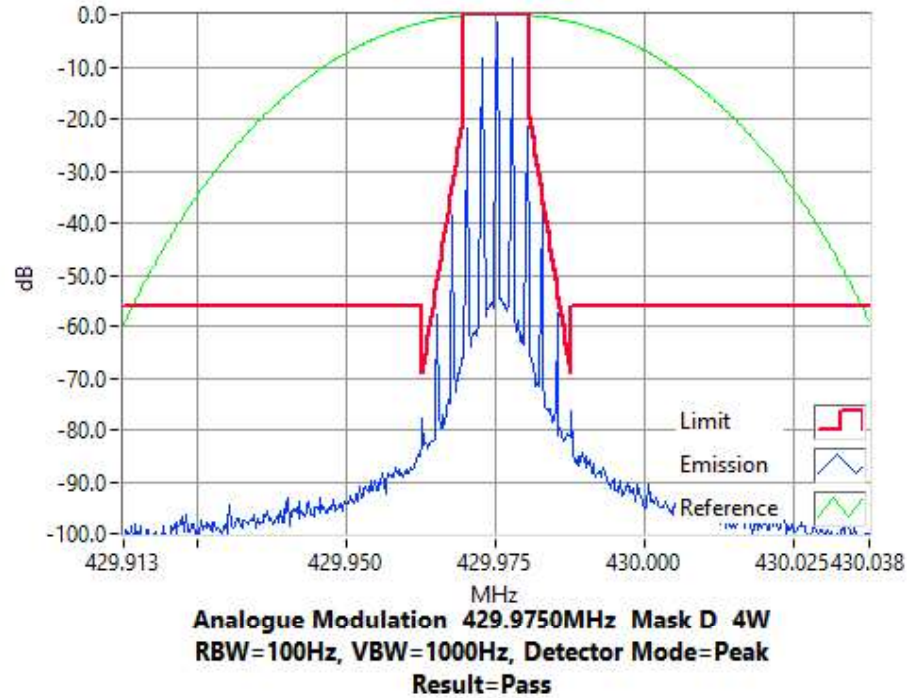


Transmitter Spectrum Masks

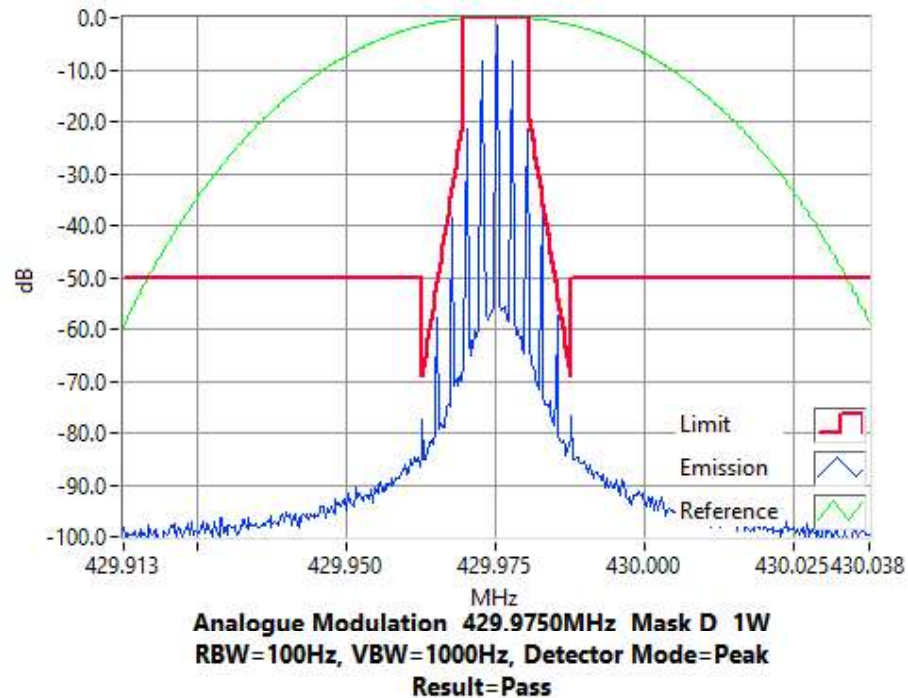
ANALOGUE VOICE

SPECIFICATION: FCC 47 CFR 2.1049 (c) RSS-119 5.5

Tx FREQUENCY: 429.975 MHz 4 W 12.5 kHz Channel Spacing



Tx FREQUENCY: 429.975 MHz 1 W 12.5 kHz Channel Spacing

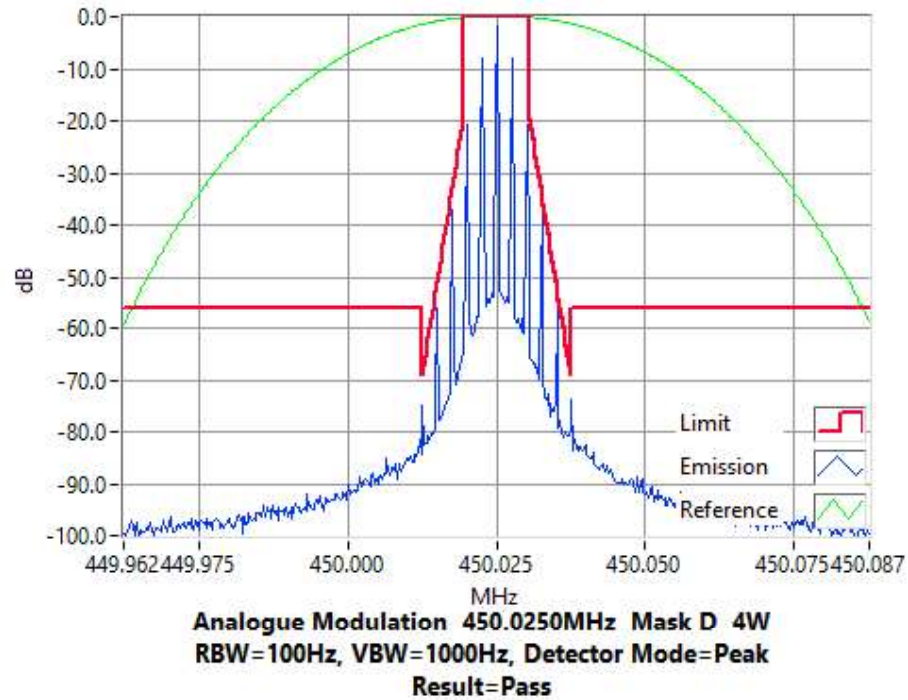


Transmitter Spectrum Masks

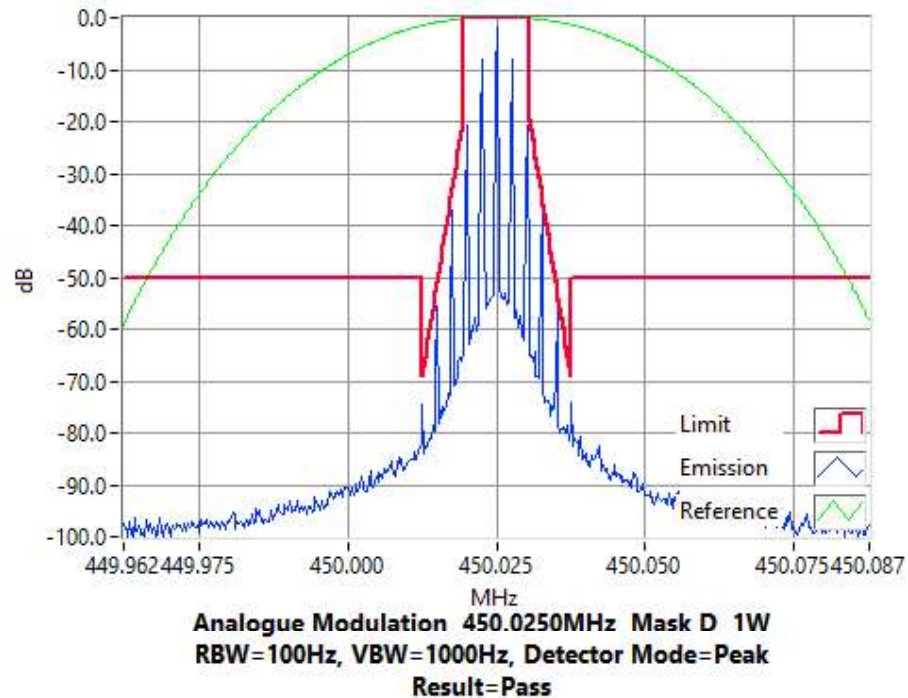
ANALOGUE VOICE

SPECIFICATION: FCC 47 CFR 2.1049 (c) RSS-119 5.5

Tx FREQUENCY: 450.025 MHz 4 W 12.5 kHz Channel Spacing



Tx FREQUENCY: 450.025 MHz 1 W 12.5 kHz Channel Spacing

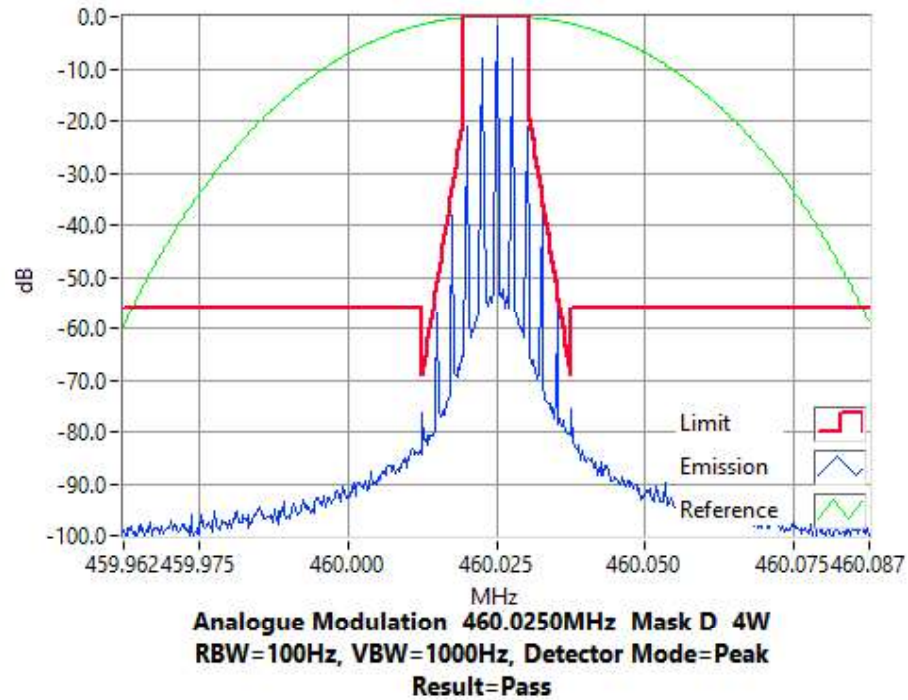


Transmitter Spectrum Masks

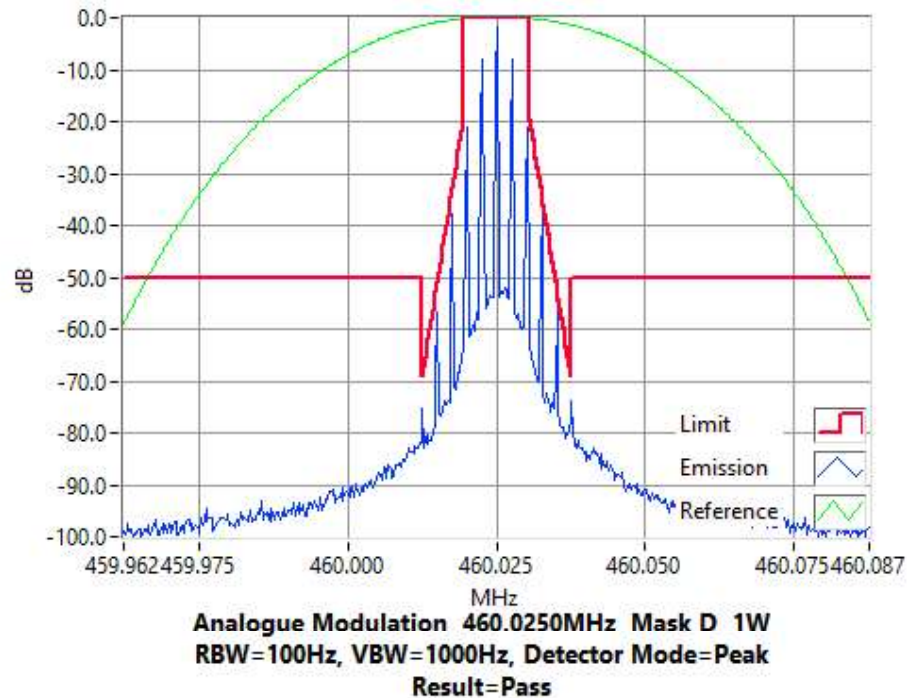
ANALOGUE VOICE

SPECIFICATION: FCC 47 CFR 2.1049 (c) RSS-119 5.5

Tx FREQUENCY: 460.025 MHz 4 W 12.5 kHz Channel Spacing



Tx FREQUENCY: 460.025 MHz 1 W 12.5 kHz Channel Spacing

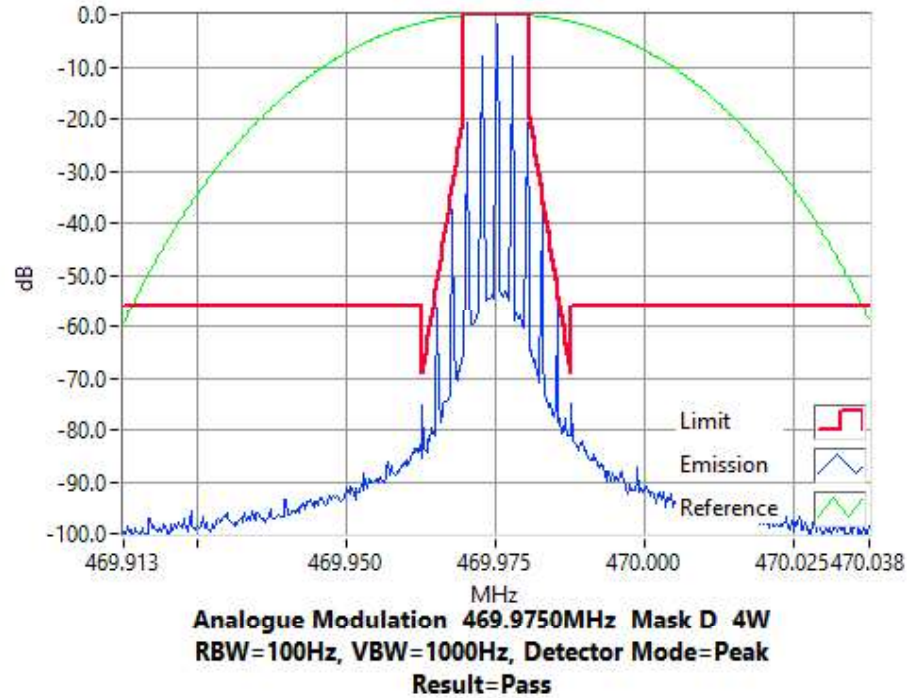


Transmitter Spectrum Masks

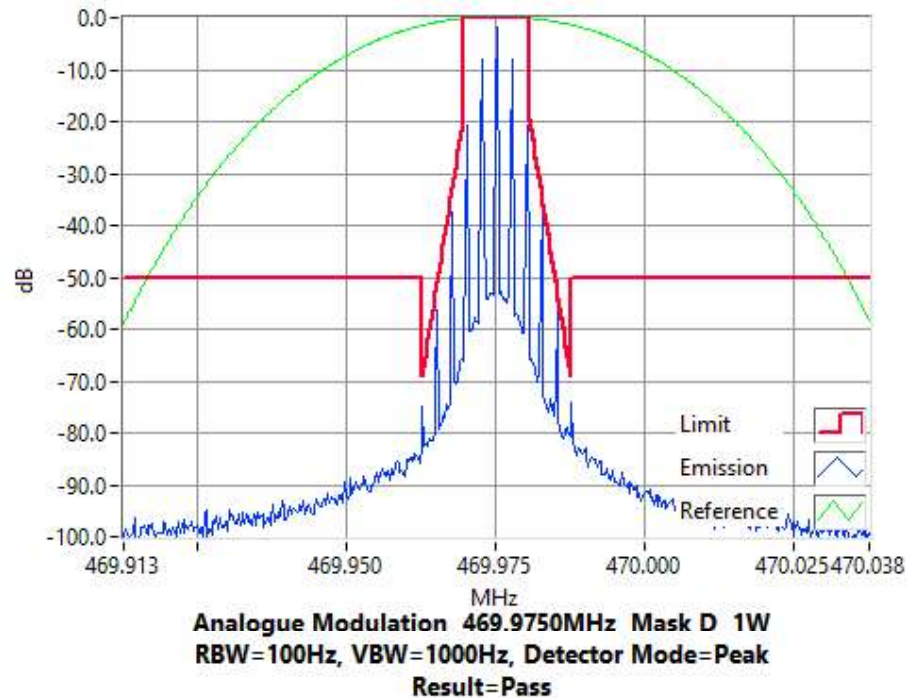
ANALOGUE VOICE

SPECIFICATION: FCC 47 CFR 2.1049 (c) RSS-119 5.5

Tx FREQUENCY: 469.975 MHz 4 W 12.5 kHz Channel Spacing



Tx FREQUENCY: 469.975 MHz 1 W 12.5 kHz Channel Spacing

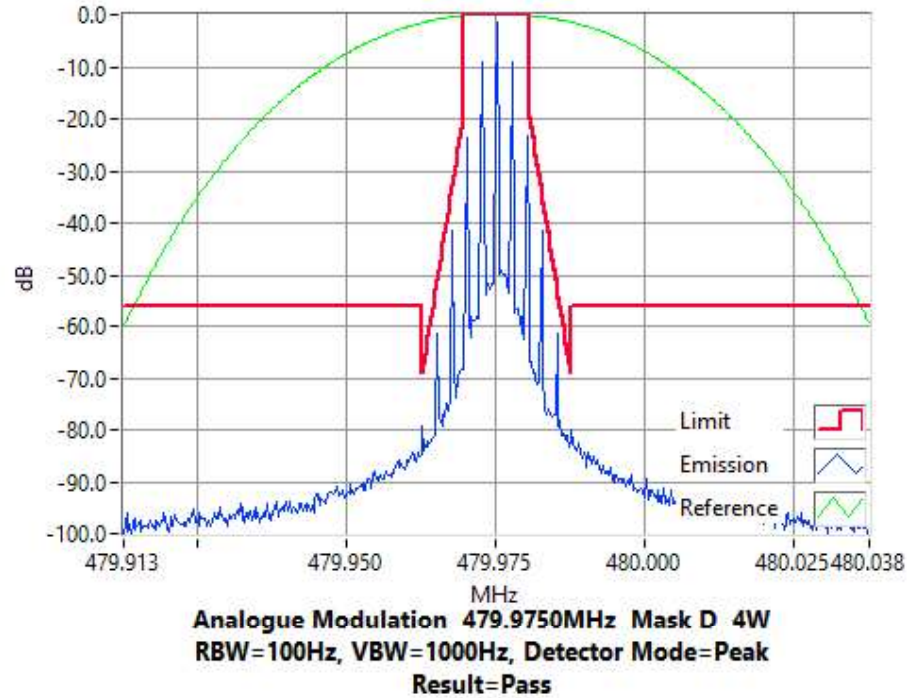


Transmitter Spectrum Masks

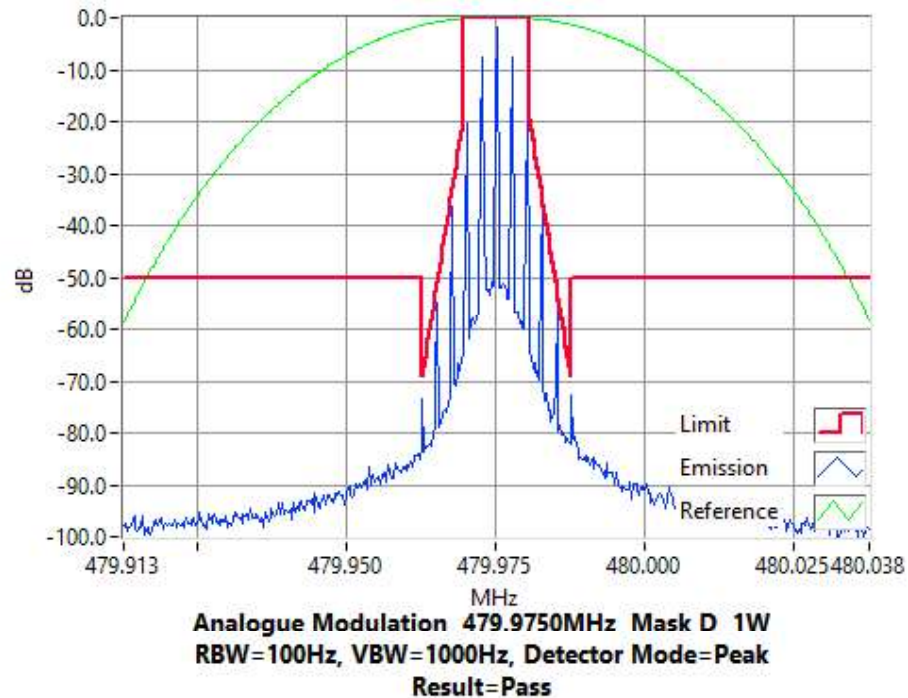
ANALOGUE VOICE

SPECIFICATION: FCC 47 CFR 2.1049 (c) RSS-119 5.5

Tx FREQUENCY: 479.975 MHz 4 W 12.5 kHz Channel Spacing



Tx FREQUENCY: 479.975 MHz 1 W 12.5 kHz Channel Spacing

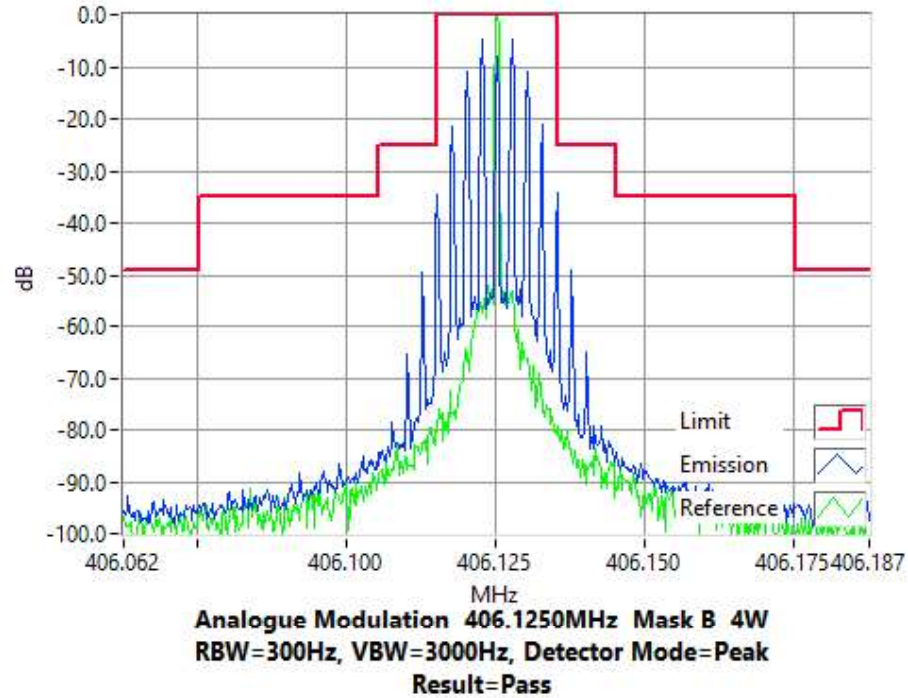


Transmitter Spectrum Masks

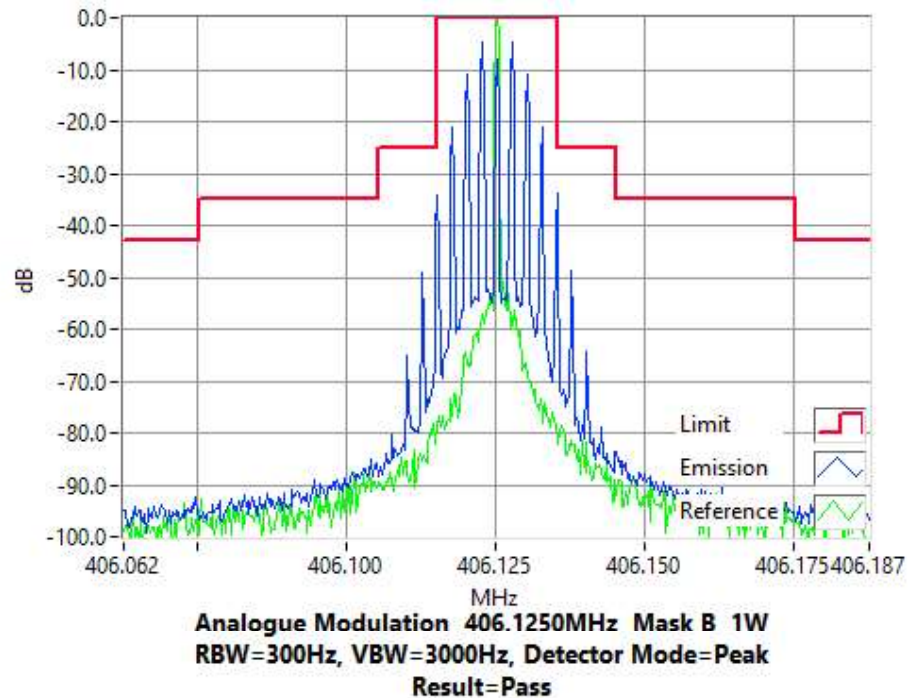
ANALOGUE VOICE

SPECIFICATION: FCC 47 CFR 2.1049 (c) RSS-119 5.5

Tx FREQUENCY: 406.125 MHz 4 W 25.0 kHz Channel Spacing



Tx FREQUENCY: 406.125 MHz 1 W 25.0 kHz Channel Spacing

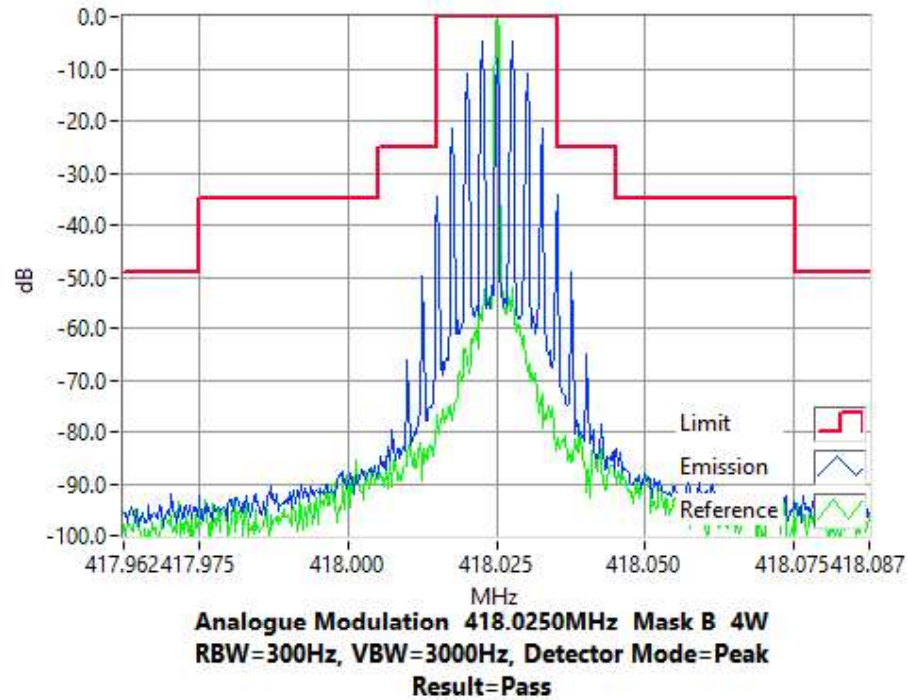


Transmitter Spectrum Masks

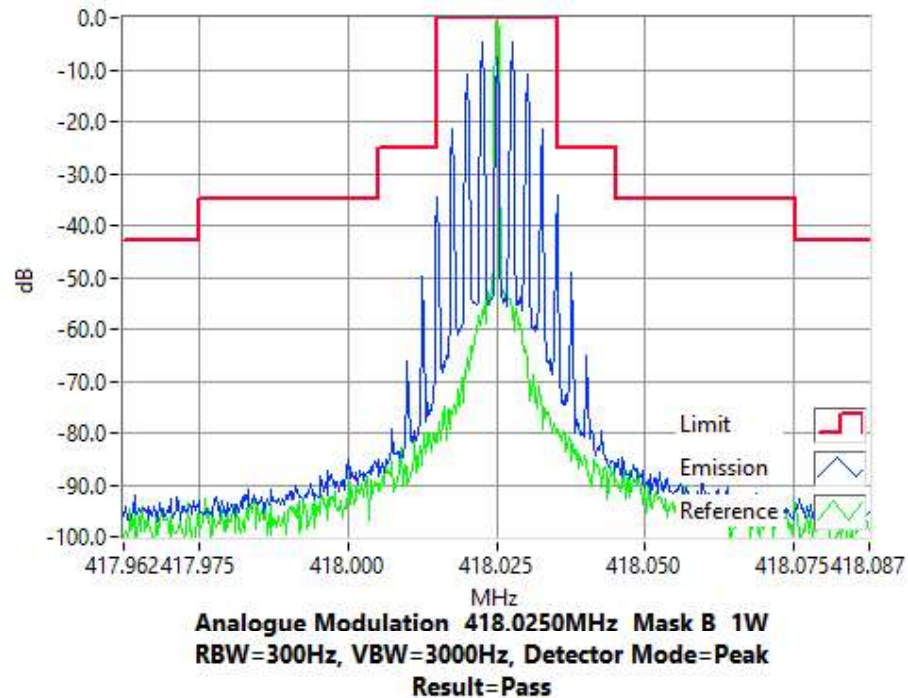
ANALOGUE VOICE

SPECIFICATION: FCC 47 CFR 2.1049 (c) RSS-119 5.5

Tx FREQUENCY: 418.025 MHz 4 W 25.0 kHz Channel Spacing



Tx FREQUENCY: 418.025 MHz 1 W 25.0 kHz Channel Spacing

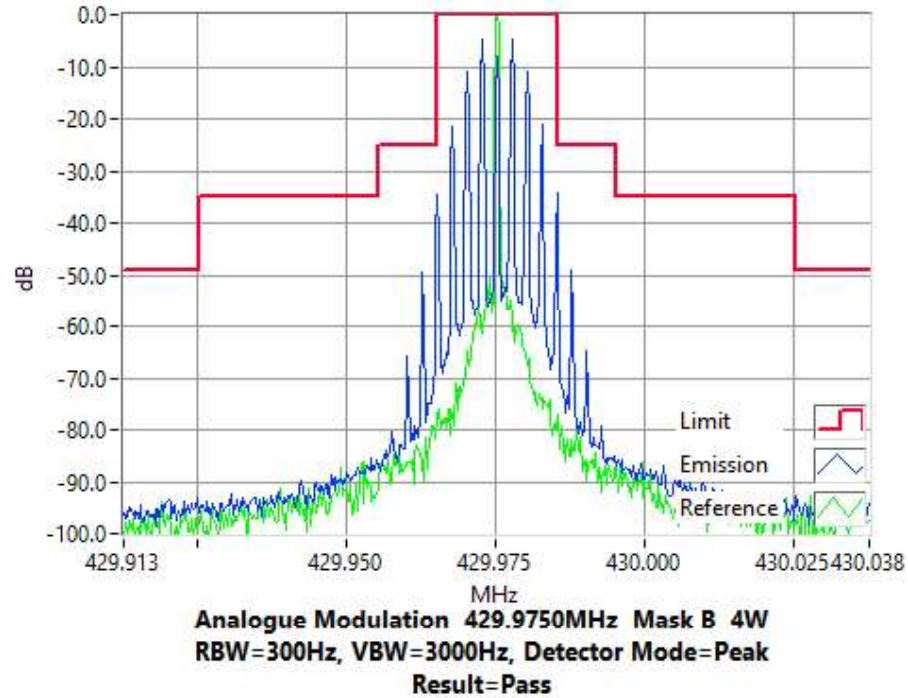


Transmitter Spectrum Masks

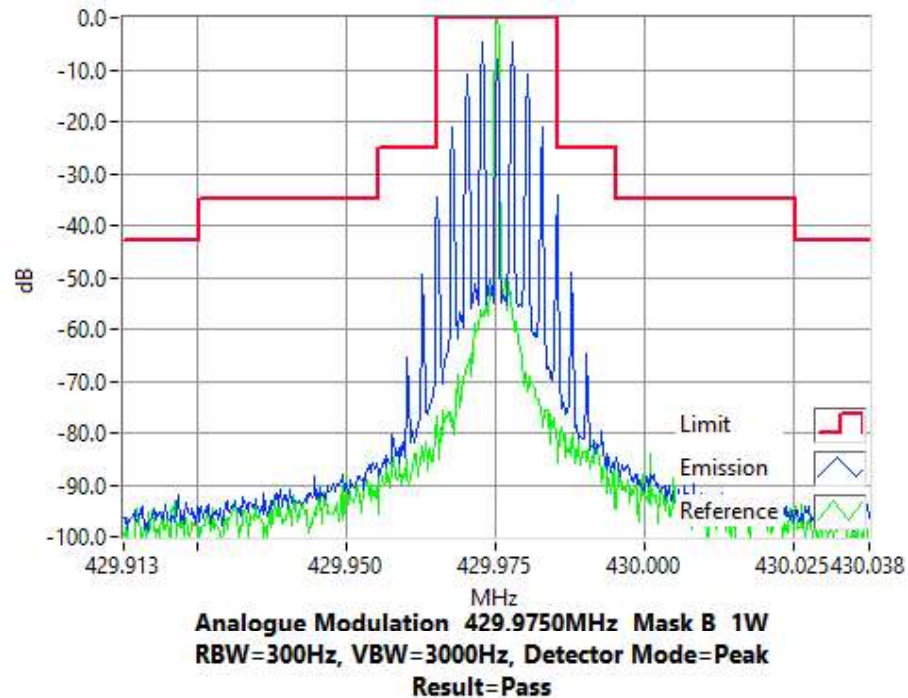
ANALOGUE VOICE

SPECIFICATION: FCC 47 CFR 2.1049 (c) RSS-119 5.5

Tx FREQUENCY: 429.975 MHz 4 W 25.0 kHz Channel Spacing



Tx FREQUENCY: 429.975 MHz 1 W 25.0 kHz Channel Spacing

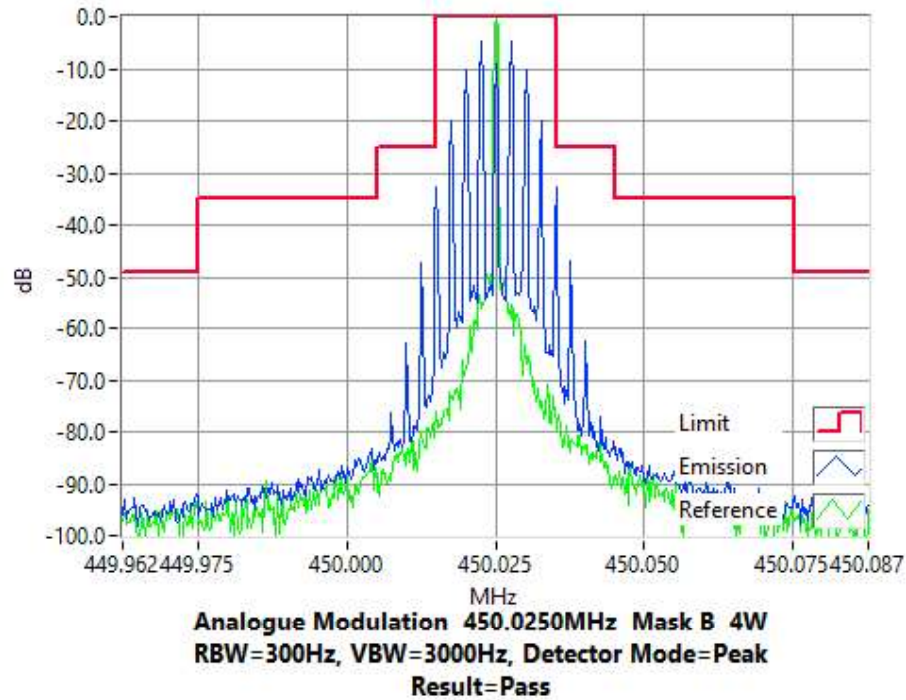


Transmitter Spectrum Masks

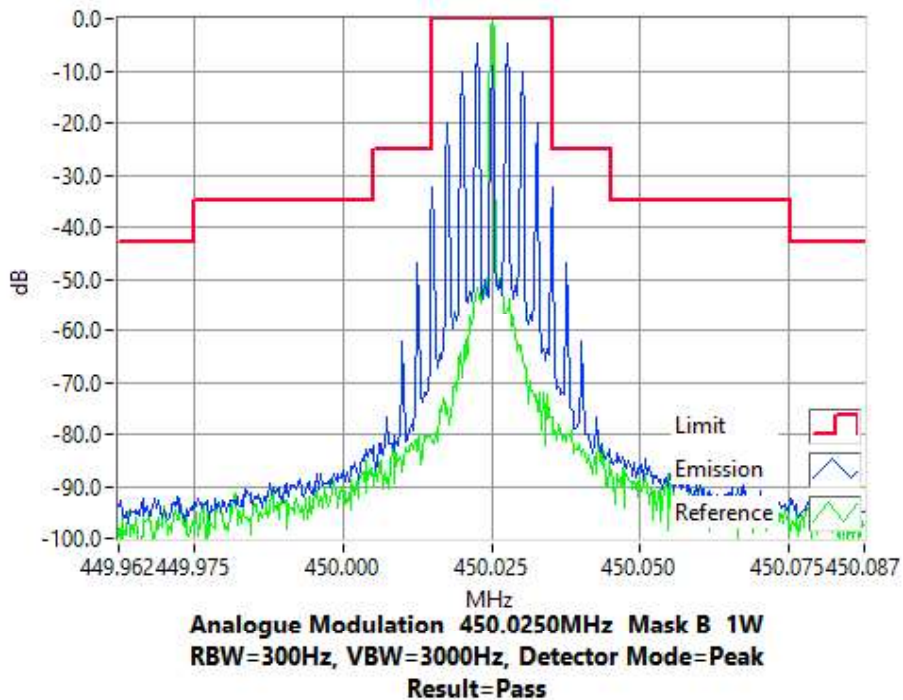
ANALOGUE VOICE

SPECIFICATION: FCC 47 CFR 2.1049 (c) RSS-119 5.5

Tx FREQUENCY: 450.025 MHz 4 W 25.0 kHz Channel Spacing



Tx FREQUENCY: 450.025 MHz 1 W 25.0 kHz Channel Spacing

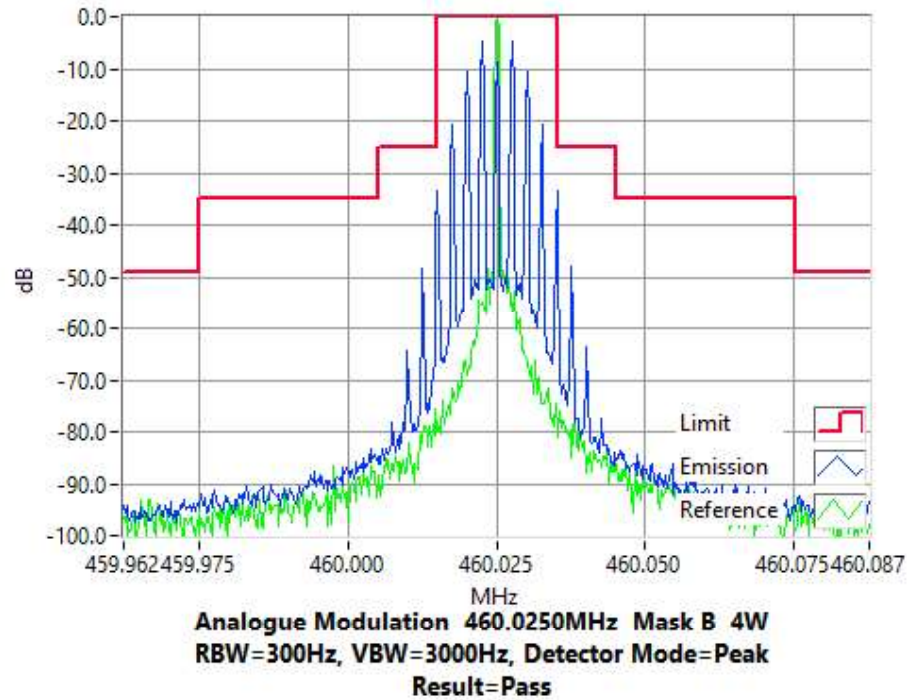


Transmitter Spectrum Masks

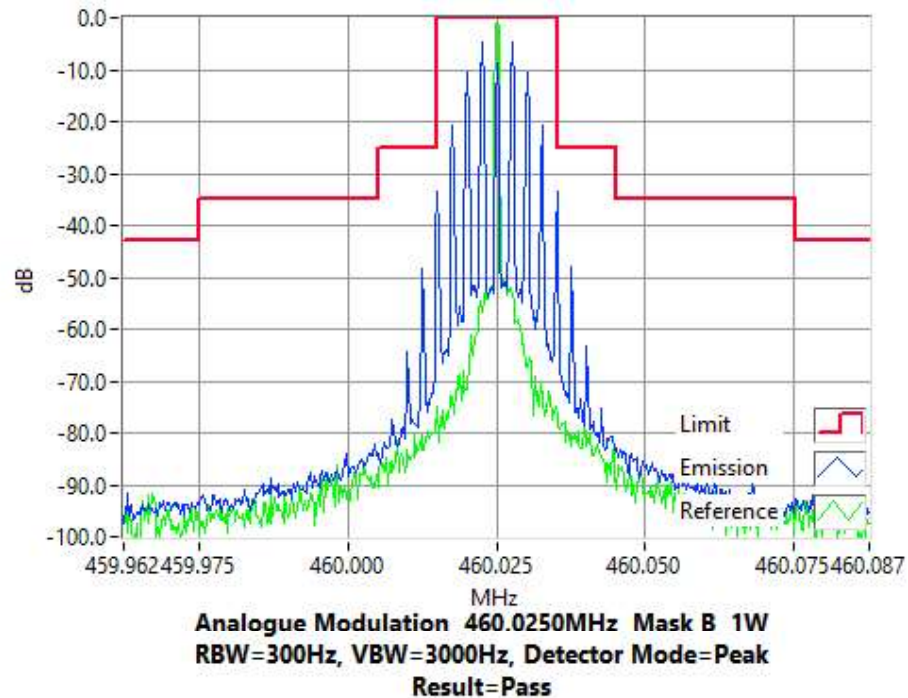
ANALOGUE VOICE

SPECIFICATION: FCC 47 CFR 2.1049 (c) RSS-119 5.5

Tx FREQUENCY: 460.025 MHz 4 W 25.0 kHz Channel Spacing



Tx FREQUENCY: 460.025 MHz 1 W 25.0 kHz Channel Spacing

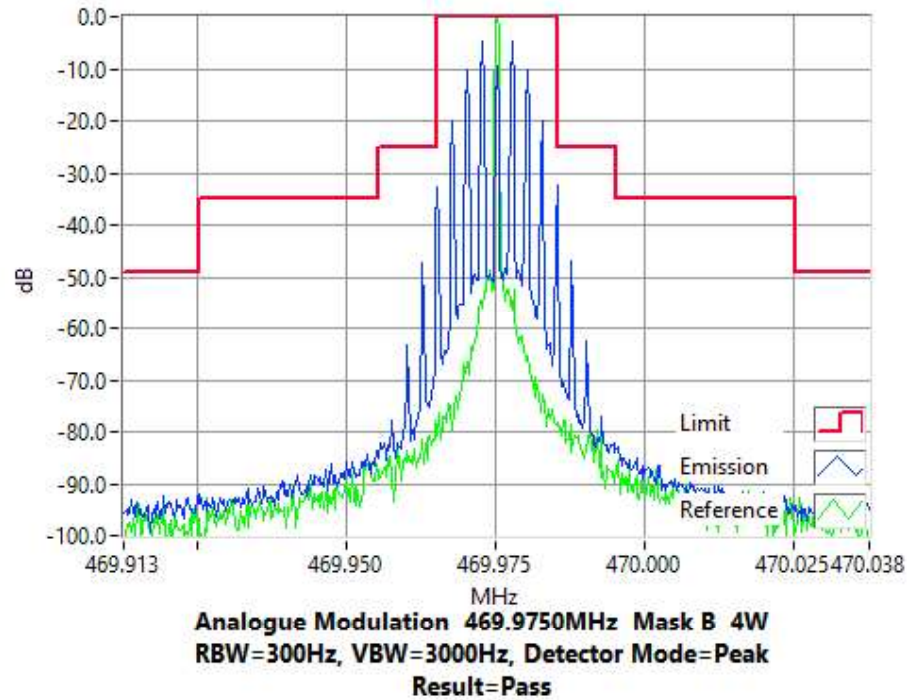


Transmitter Spectrum Masks

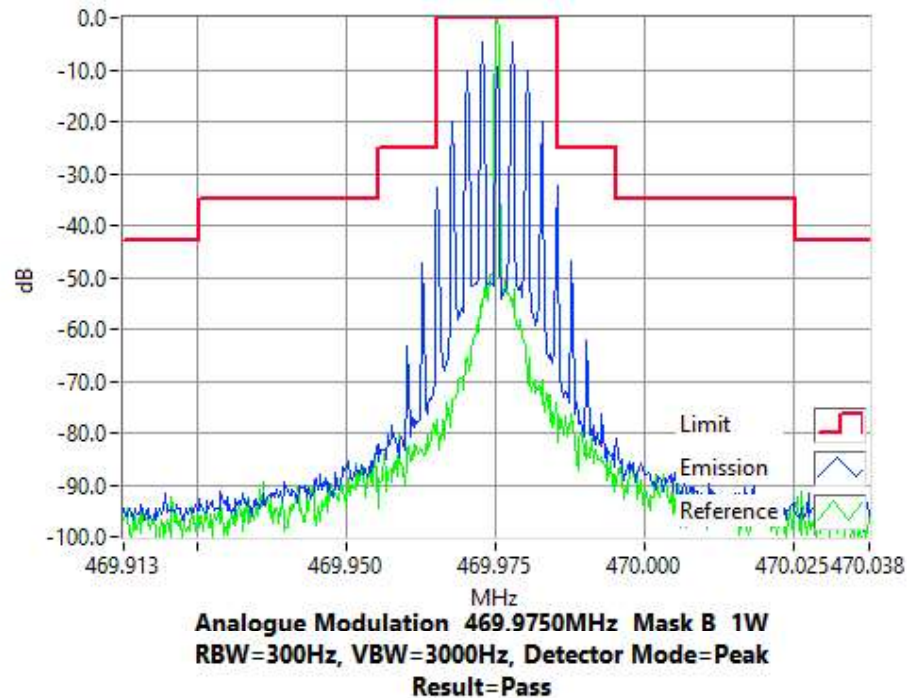
ANALOGUE VOICE

SPECIFICATION: FCC 47 CFR 2.1049 (c) RSS-119 5.5

Tx FREQUENCY: 469.975 MHz 4 W 25.0 kHz Channel Spacing



Tx FREQUENCY: 469.975 MHz 1 W 25.0 kHz Channel Spacing

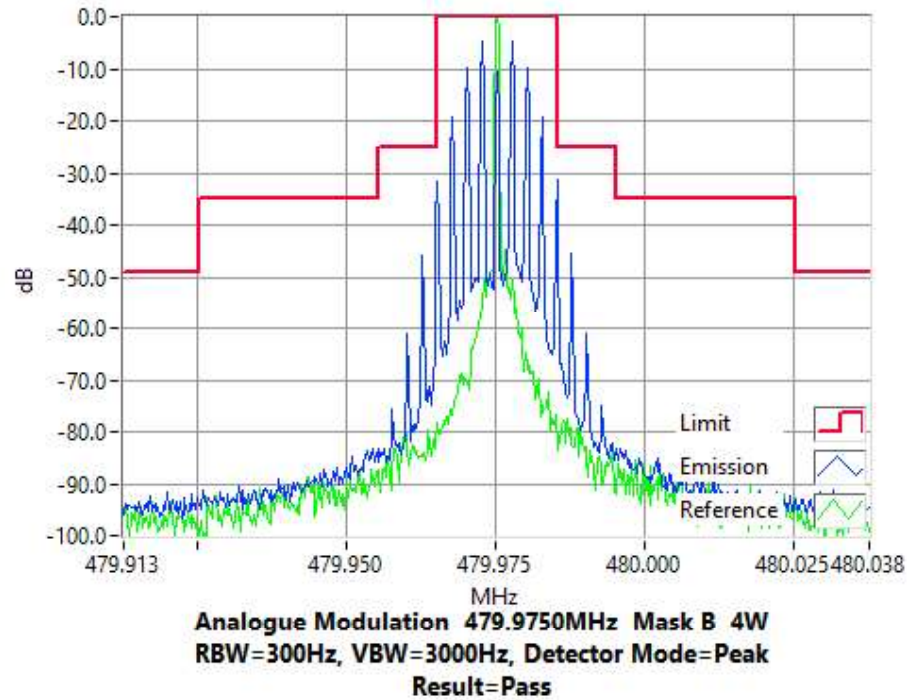


Transmitter Spectrum Masks

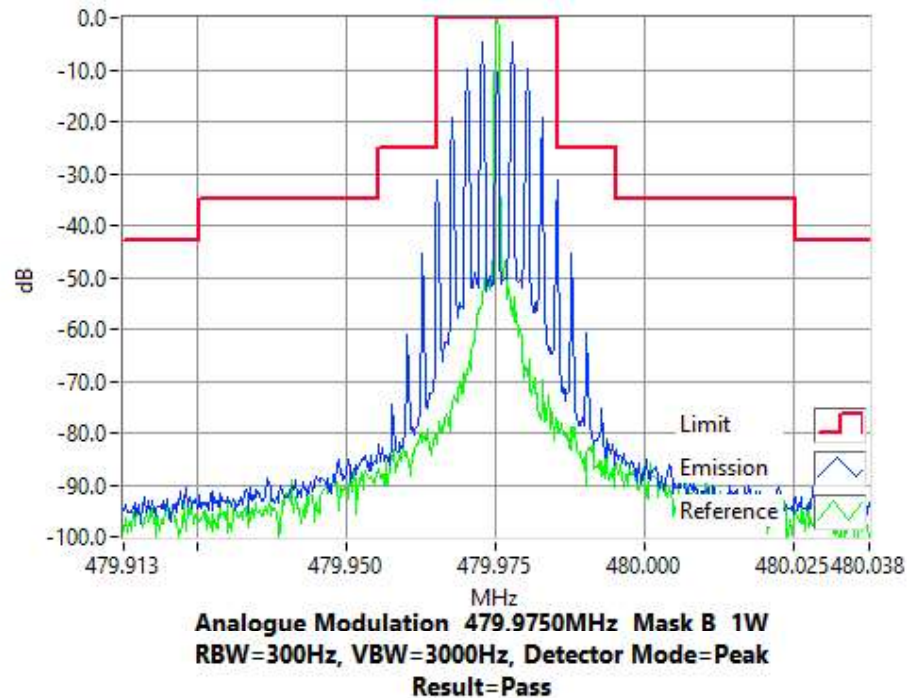
ANALOGUE VOICE

SPECIFICATION: FCC 47 CFR 2.1049 (c) RSS-119 5.5

Tx FREQUENCY: 479.975 MHz 4 W 25.0 kHz Channel Spacing



Tx FREQUENCY: 479.975 MHz 1 W 25.0 kHz Channel Spacing

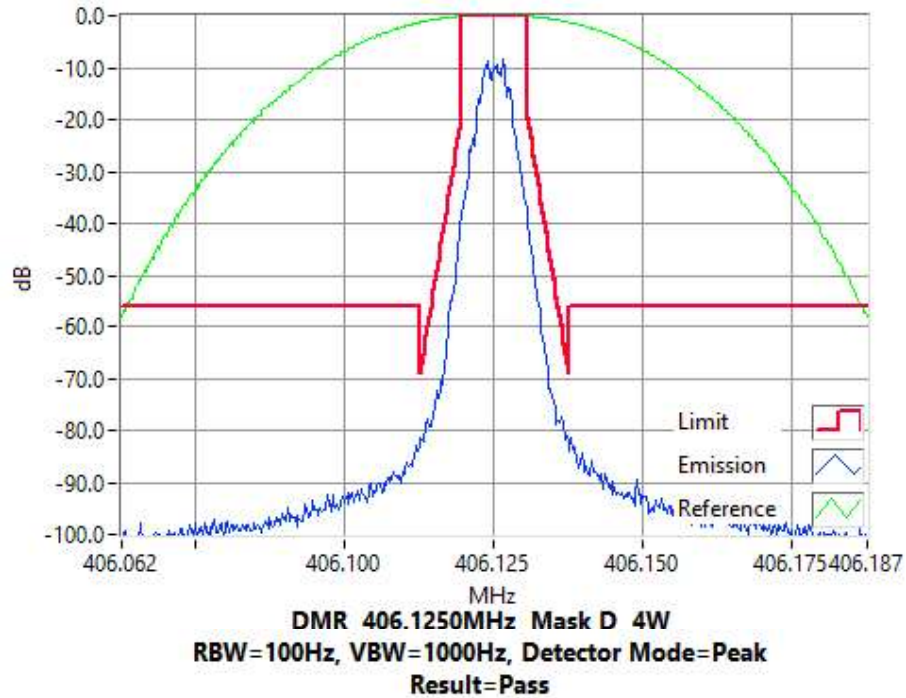


Transmitter Spectrum Masks

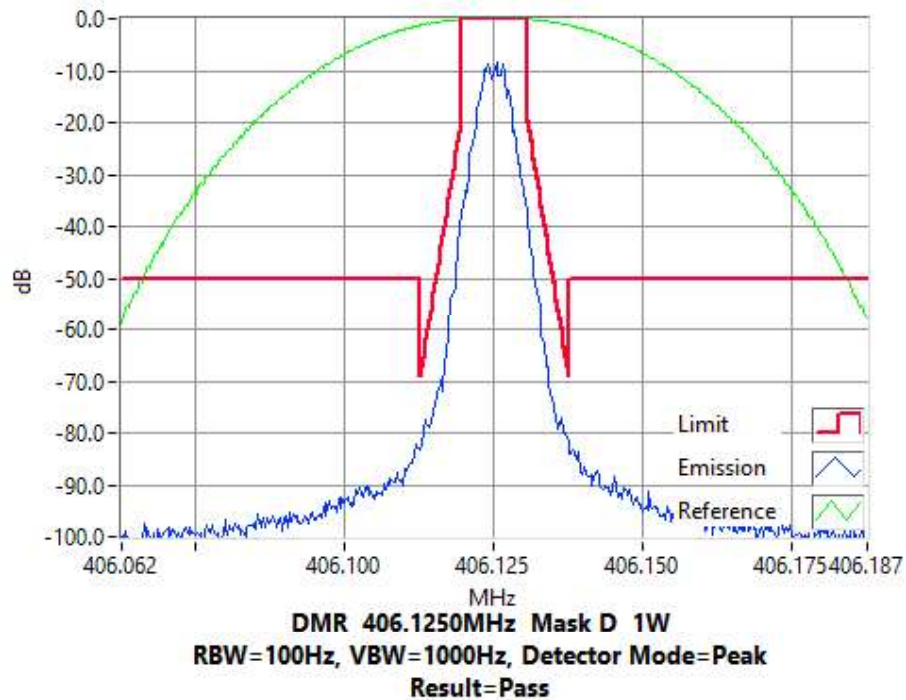
DMR

SPECIFICATION: FCC 47 CFR 2.1049 (c) RSS-119 5.5

Tx FREQUENCY: 406.125 MHz 4 W 12.5 kHz Channel Spacing



Tx FREQUENCY: 406.125 MHz 1 W 12.5 kHz Channel Spacing

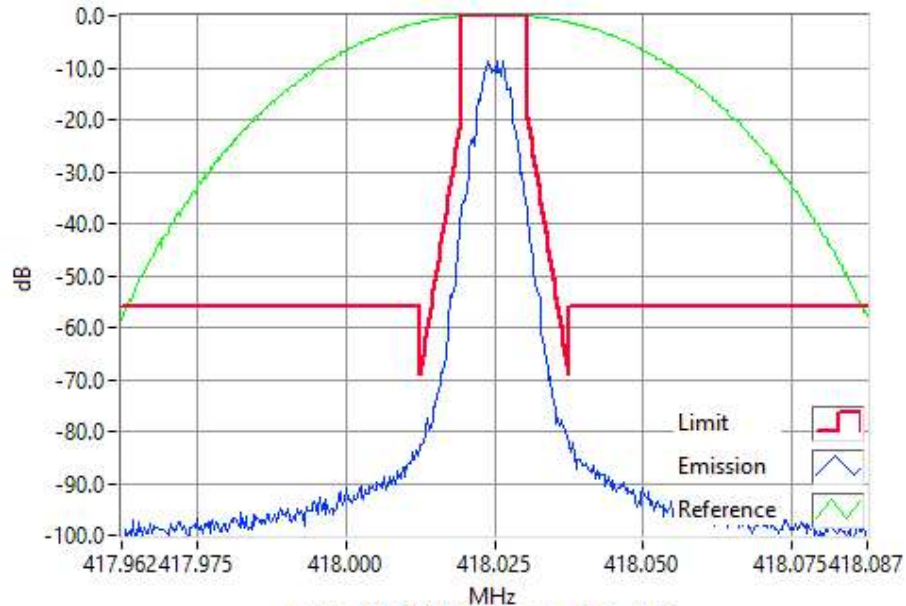


Transmitter Spectrum Masks

DMR

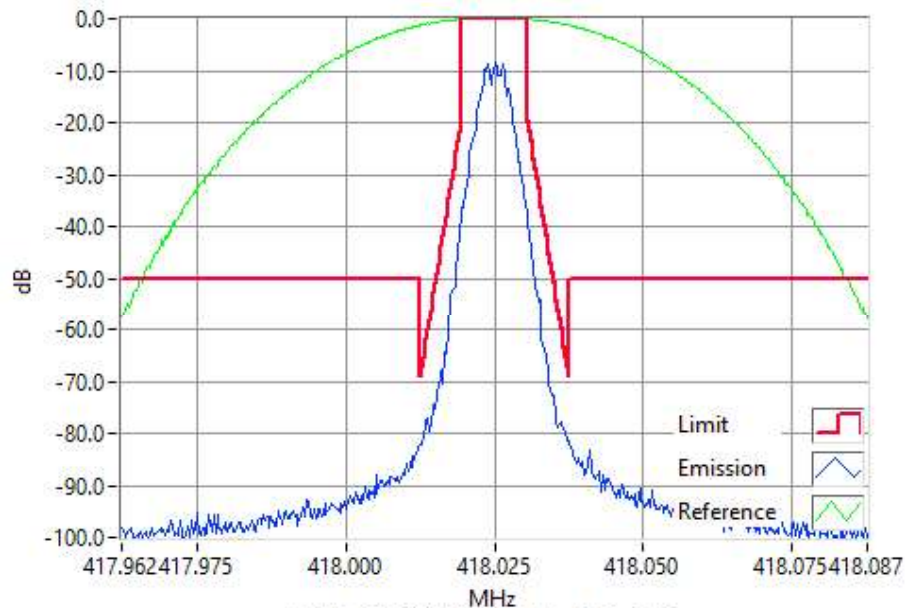
SPECIFICATION: FCC 47 CFR 2.1049 (c) RSS-119 5.5

Tx FREQUENCY: 418.025 MHz 4 W 12.5 kHz Channel Spacing



DMR 418.0250MHz Mask D 4W
RBW=100Hz, VBW=1000Hz, Detector Mode=Peak
Result=Pass

Tx FREQUENCY: 418.025 MHz 1 W 12.5 kHz Channel Spacing



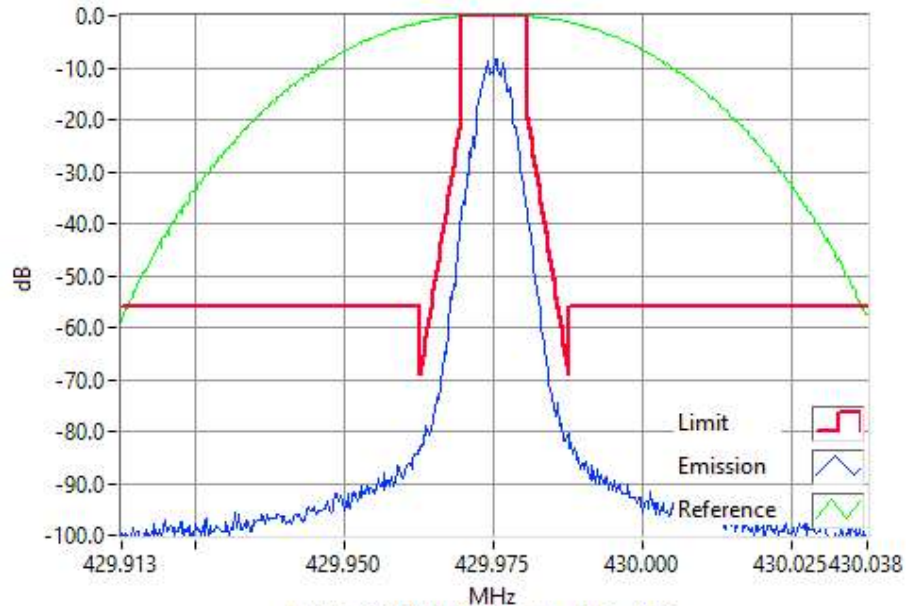
DMR 418.0250MHz Mask D 1W
RBW=100Hz, VBW=1000Hz, Detector Mode=Peak
Result=Pass

Transmitter Spectrum Masks

DMR

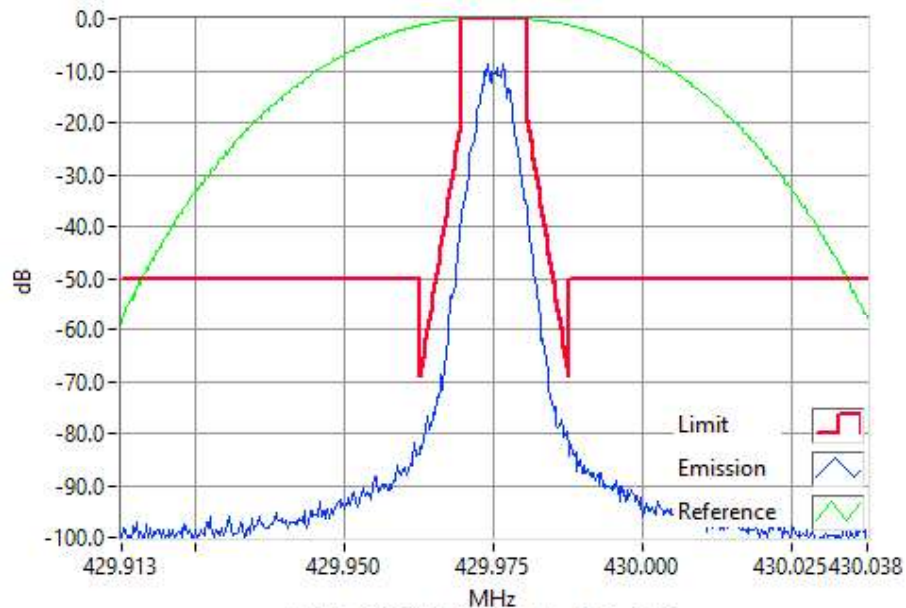
SPECIFICATION: FCC 47 CFR 2.1049 (c) RSS-119 5.5

Tx FREQUENCY: 429.975 MHz 4 W 12.5 kHz Channel Spacing



DMR 429.9750MHz Mask D 4W
RBW=100Hz, VBW=1000Hz, Detector Mode=Peak
Result=Pass

Tx FREQUENCY: 429.975 MHz 1 W 12.5 kHz Channel Spacing



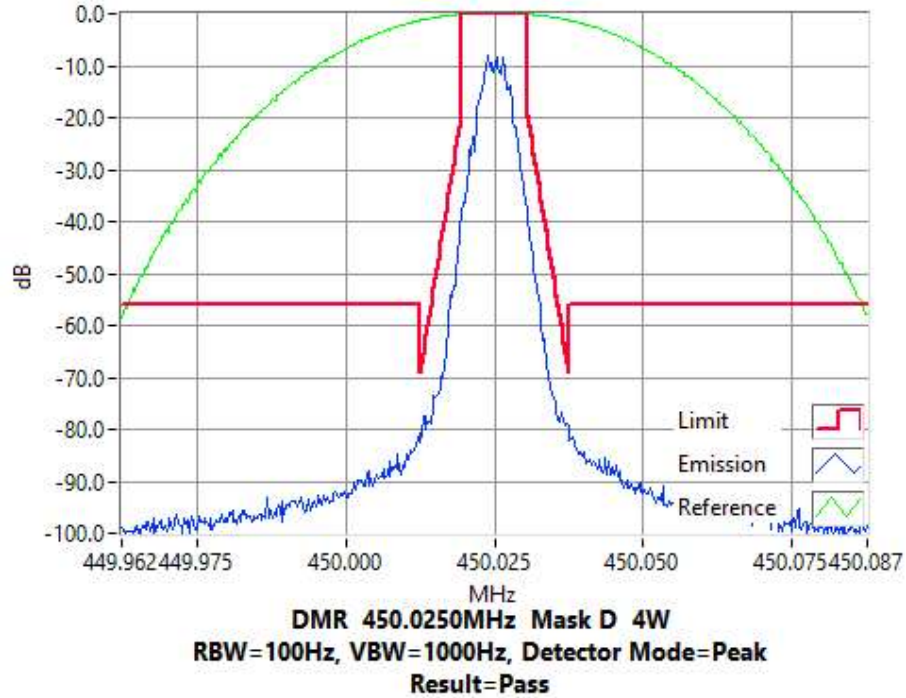
DMR 429.9750MHz Mask D 1W
RBW=100Hz, VBW=1000Hz, Detector Mode=Peak
Result=Pass

Transmitter Spectrum Masks

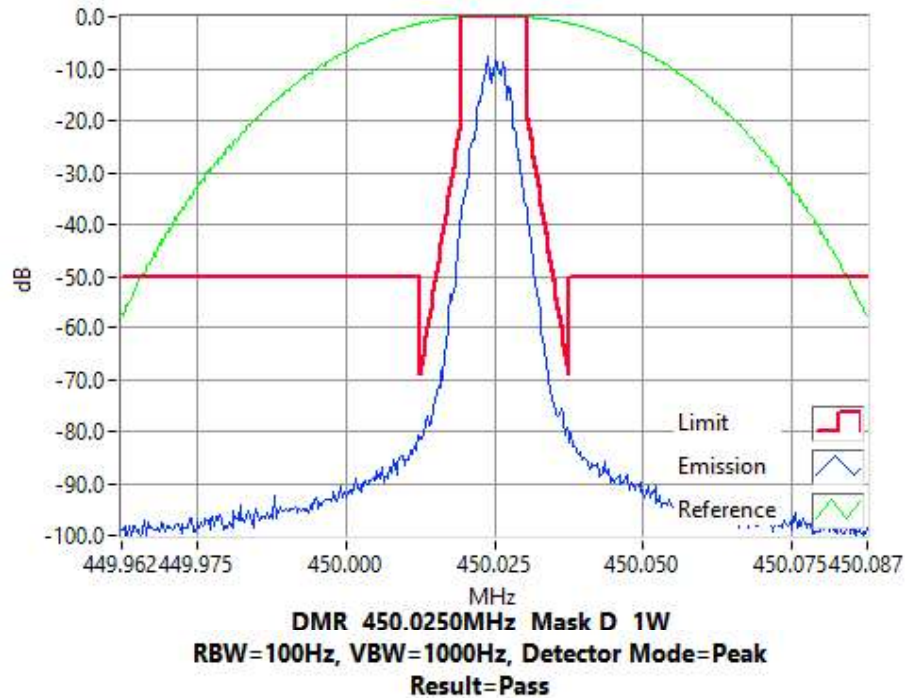
DMR

SPECIFICATION: FCC 47 CFR 2.1049 (c) RSS-119 5.5

Tx FREQUENCY: 450.025 MHz 4 W 12.5 kHz Channel Spacing



Tx FREQUENCY: 450.025 MHz 1 W 12.5 kHz Channel Spacing

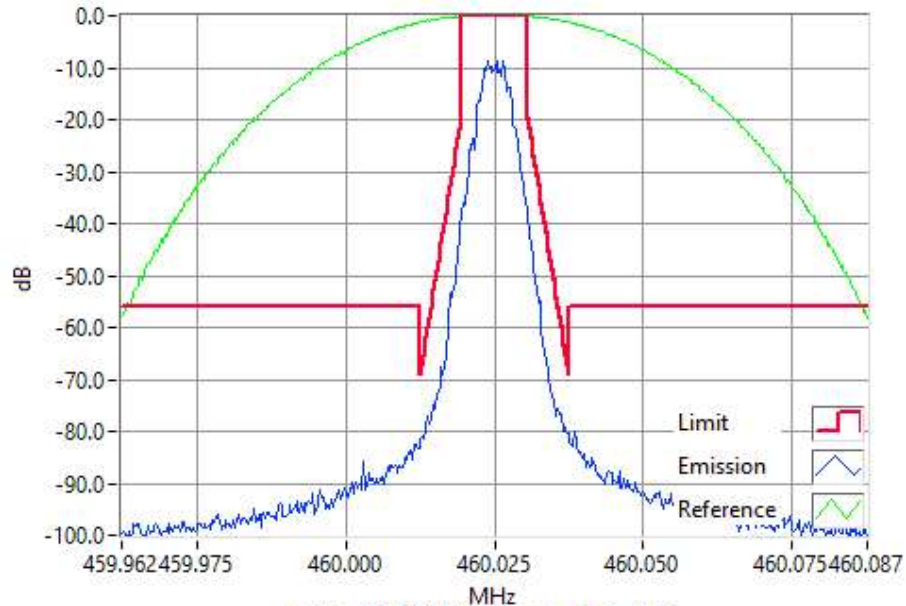


Transmitter Spectrum Masks

DMR

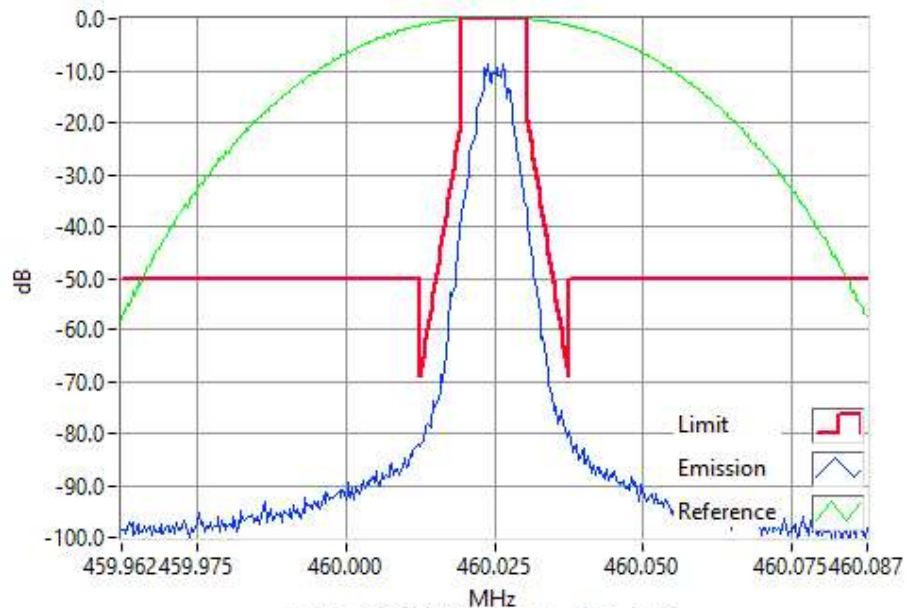
SPECIFICATION: FCC 47 CFR 2.1049 (c) RSS-119 5.5

Tx FREQUENCY: 460.025 MHz 4 W 12.5 kHz Channel Spacing



DMR 460.0250MHz Mask D 4W
RBW=100Hz, VBW=1000Hz, Detector Mode=Peak
Result=Pass

Tx FREQUENCY: 460.025 MHz 1 W 12.5 kHz Channel Spacing



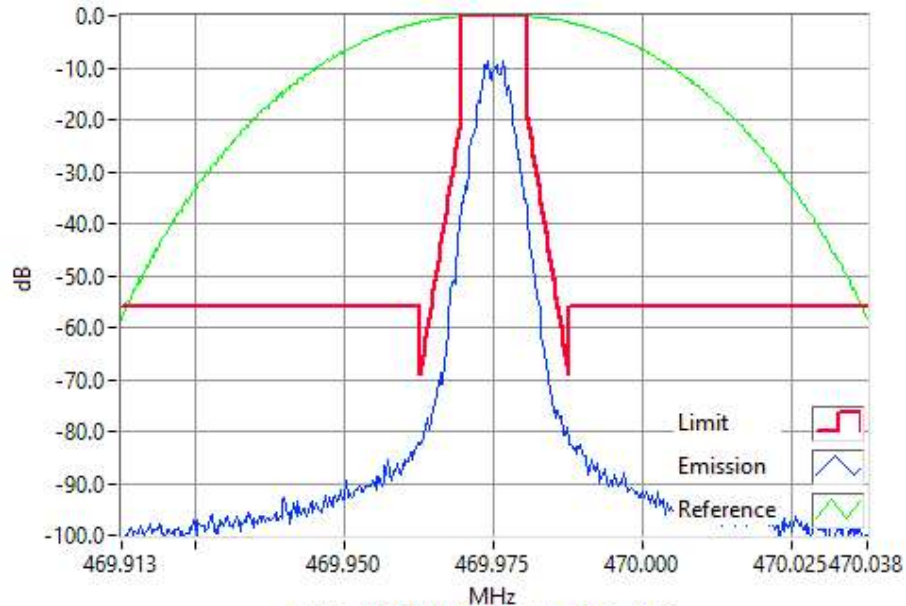
DMR 460.0250MHz Mask D 1W
RBW=100Hz, VBW=1000Hz, Detector Mode=Peak
Result=Pass

Transmitter Spectrum Masks

DMR

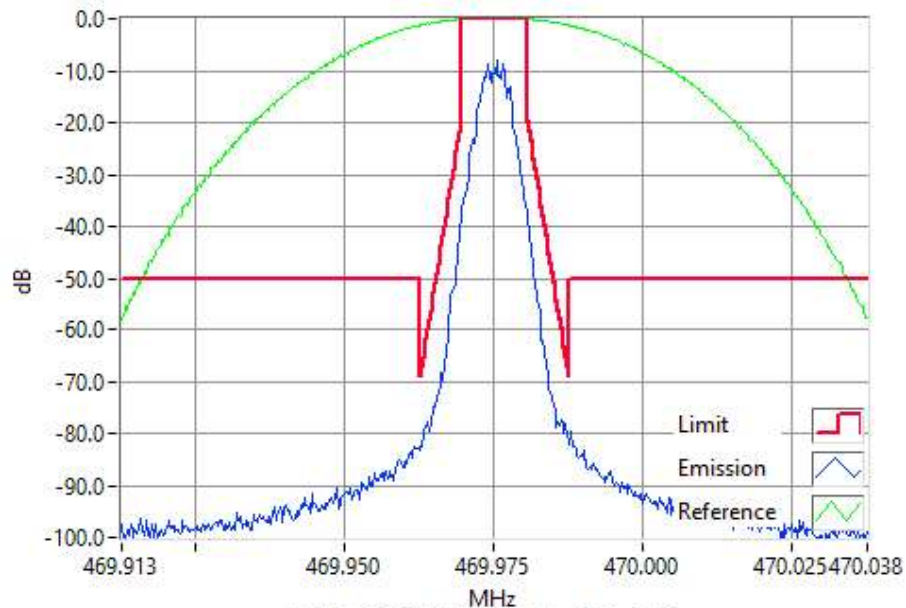
SPECIFICATION: FCC 47 CFR 2.1049 (c) RSS-119 5.5

Tx FREQUENCY: 469.975 MHz 4 W 12.5 kHz Channel Spacing



DMR 469.9750MHz Mask D 4W
RBW=100Hz, VBW=1000Hz, Detector Mode=Peak
Result=Pass

Tx FREQUENCY: 469.975 MHz 1 W 12.5 kHz Channel Spacing



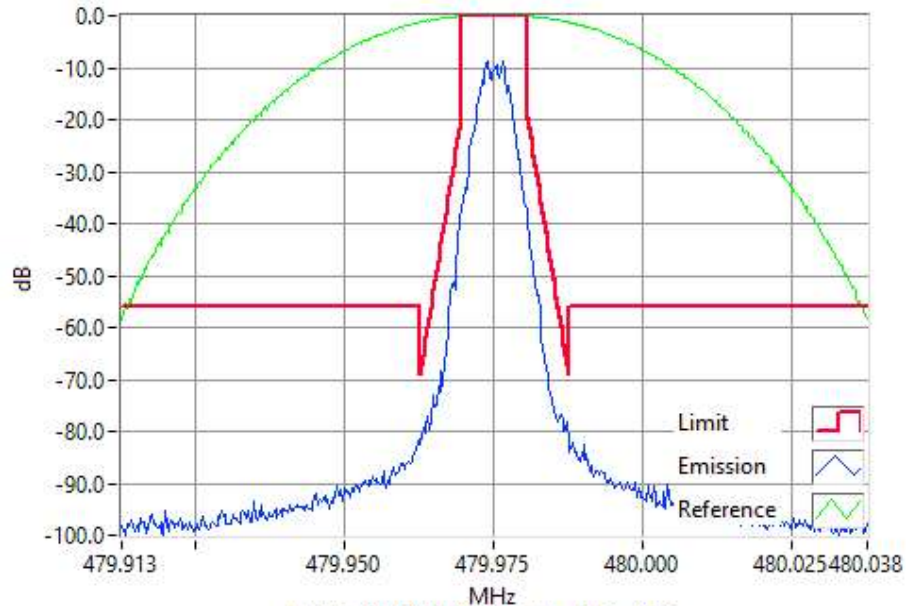
DMR 469.9750MHz Mask D 1W
RBW=100Hz, VBW=1000Hz, Detector Mode=Peak
Result=Pass

Transmitter Spectrum Masks

DMR

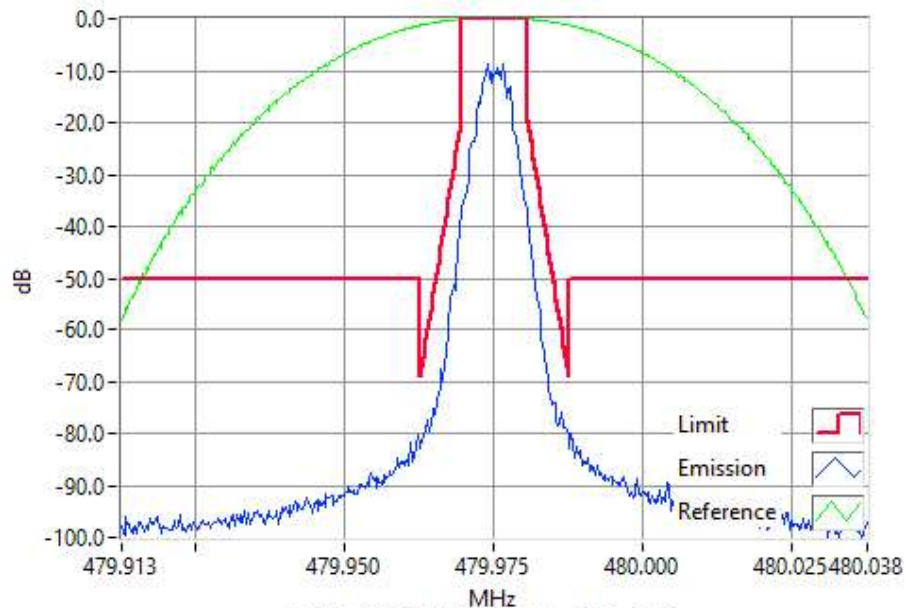
SPECIFICATION: FCC 47 CFR 2.1049 (c) RSS-119 5.5

Tx FREQUENCY: 479.975 MHz 4 W 12.5 kHz Channel Spacing



DMR 479.9750MHz Mask D 4W
RBW=100Hz, VBW=1000Hz, Detector Mode=Peak
Result=Pass

Tx FREQUENCY: 479.975 MHz 1 W 12.5 kHz Channel Spacing



DMR 479.9750MHz Mask D 1W
RBW=100Hz, VBW=1000Hz, Detector Mode=Peak
Result=Pass

TRANSMITTER SPURIOUS EMISSIONS (CONDUCTED)

SPECIFICATIONS: FCC 47 CFR 2.1051

RSS-119 5.8

GUIDE: ANSI C63.26 5.7

MEASUREMENT PROCEDURE:

1. Refer Annex A for equipment set up.
2. The frequency range examined was from the lowest frequency generated within the EUT, to a frequency higher than the 10th Harmonic:
9 kHz to Fc-BW
Fc + BW to 10Fc (4.8 GHz)
3. The EUT was set to transmit high or low power. A scan is performed with a resolution bandwidth of 100 kHz and a video bandwidth of 300 kHz for frequencies up to 1 GHz, and a resolution bandwidth of 1 MHz and a video bandwidth of 3 MHz for frequencies above 1 GHz.
4. For frequencies close to the carrier the spectrum was measured using a resolution bandwidth of 1kHz, the results were then integrated to give measurements for 100kHz bandwidth.
5. A low-pass filter was used for frequencies from 800 MHz to 4.0 GHz.
6. For each frequency range the spectrum analyser was loaded with the appropriate calibration figures to compensate for the cables, attenuator, and filter losses, allowing the emission levels to be read directly with no further calculation.
7. The results of the various sweeps were combined programmatically to give charts for frequencies near the carrier, up to 1GHz and above 1GHz.
The calibrations are loaded as an overall reference level offset plus a set of correction factors for the required frequency band.

Spurious emissions which were attenuated by more than 20 dB below the limit were not recorded.

Example of attenuation correction: (dB)

E3673 20dB 25W BD5871	19.85	
E5015 3m Blue	1.06	
E3384 400_520MHz HPBRF	6.37	
Total Attenuation @ 812.250 MHz	27.29	Sum of component attenuation (a)
Amplitude offset	28.12	(b)
Correction @ 812.250MHz	-0.83	(a-b)

MEASUREMENT UNCERTAINTY: $\leq 12.75 \text{ GHz} \pm 3.0 \text{ dB}$

MEASUREMENT RESULTS:

See the tables and plots on the following pages for 12.5 kHz channel spacing.

LIMIT CLAUSES: FCC 47 CFR 90.210

RSS-119 5.8

Photo: Conducted Emissions Test Setup



Spurious Emissions (Tx Conducted)

SPECIFICATION: FCC 47 CFR 2.1051

RSS-119 5.8

12.5 kHz Channel Spacing

406.125 MHz @ 4 W

Emission Mask D

Emission Frequency (MHz)	Level (dBm)	Level (dBc)
~	~	~

12.5 kHz Channel Spacing

406.125 MHz @ 1 W

Emission Mask D

Emission Frequency (MHz)	Level (dBm)	Level (dBc)
~	~	~
No emissions were detected at a level greater than 20 dB below the limit.		

Spurious Emissions (Tx Conducted)

406.125 MHz	406.125 MHz
406.125MHz 4W 12.5kHz Unmodulated 100kHz RBW- 100kHz to 1GHz 1MHz RBW- 1GHz to 4.1GHz Low Pass Filter used from 740.0 MHz to 4.0 GHz Result Limit Measured Point Wanted Carrier Narrow RBW On Channel Detector = Average (rms) Fc ± 2 MHz, 8001 Pts, 7s. Swp Below 1GHz Detector = Peak, Sweep Speed = Auto, RMS average of 10 sweeps Above 1GHz Detector = Peak, Sweep Speed = Auto, RMS average of 10 sweeps Result obtained by integration of narrow RBW filter measurements: 1k Hz RBW: 404.1 MHz to 408.1 MHz	406.125MHz 1W 12.5kHz Unmodulated 100kHz RBW- 100kHz to 1GHz 1MHz RBW- 1GHz to 4.1GHz Low Pass Filter used from 740.0 MHz to 4.0 GHz Result Limit Measured Point Wanted Carrier Narrow RBW On Channel Detector = Average (rms) Fc ± 2 MHz, 8001 Pts, 7s. Swp Below 1GHz Detector = Peak, Sweep Speed = Auto, RMS average of 10 sweeps Above 1GHz Detector = Peak, Sweep Speed = Auto, RMS average of 10 sweeps Result obtained by integration of narrow RBW filter measurements: 1k Hz RBW: 404.1 MHz to 408.1 MHz

Spurious Emissions (Tx Conducted)

SPECIFICATION: FCC 47 CFR 2.1051

RSS-119 5.8

12.5 kHz Channel Spacing

418.025 MHz @ 4 W

Emission Mask D

Emission Frequency (MHz)	Level (dBm)	Level (dBc)
~	~	~

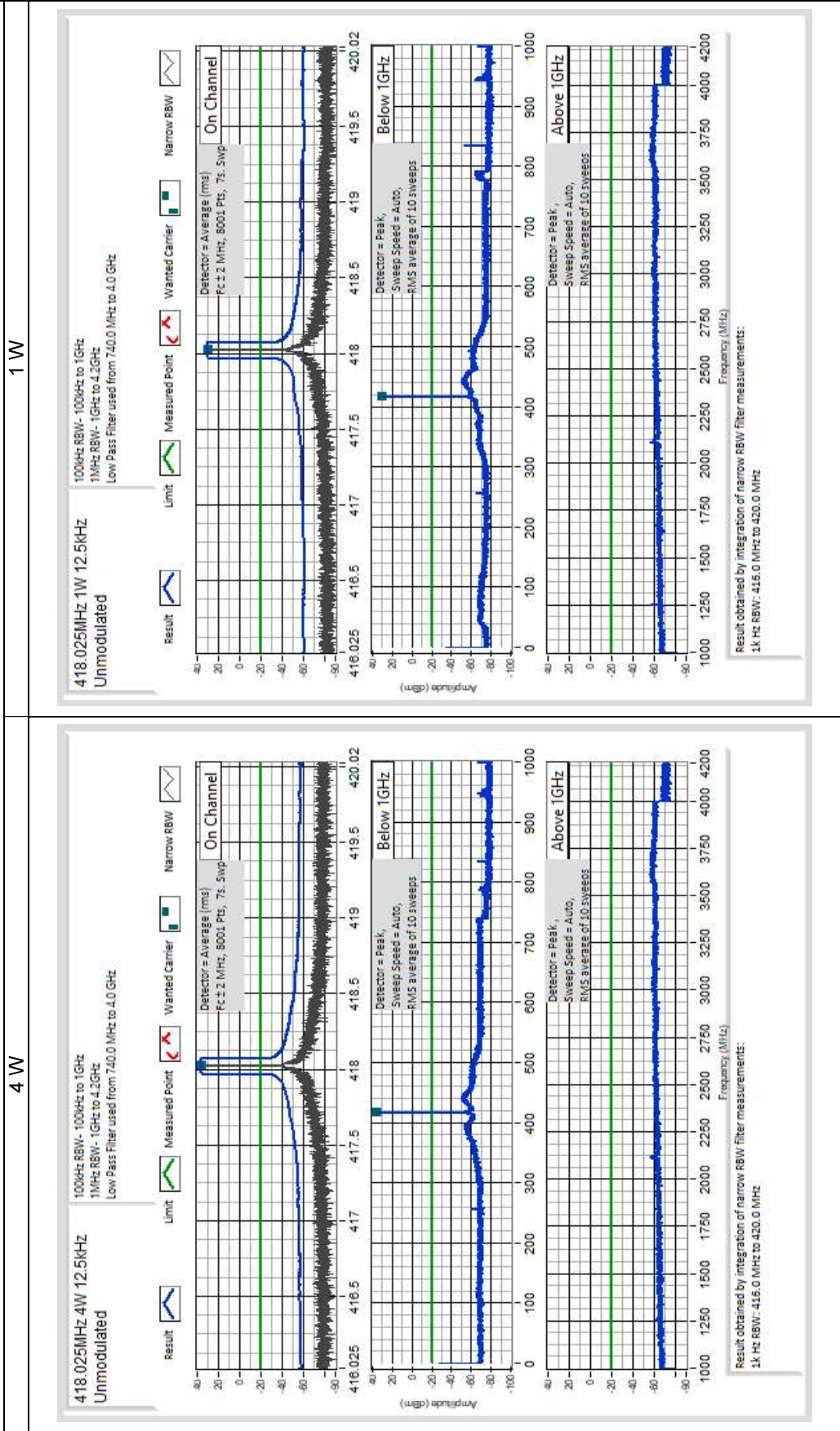
12.5 kHz Channel Spacing

418.025 MHz @ 1 W

Emission Mask D

Emission Frequency (MHz)	Level (dBm)	Level (dBc)
~	~	~
No emissions were detected at a level greater than 20 dB below the limit.		

Spurious Emissions (Tx Conducted)
418.025 MHz



Spurious Emissions (Tx Conducted)

SPECIFICATION: FCC 47 CFR 2.1051

RSS-119 5.8

12.5 kHz Channel Spacing

429.975 MHz @ 4 W

Emission Mask D

Emission Frequency (MHz)	Level (dBm)	Level (dBc)
~	~	~

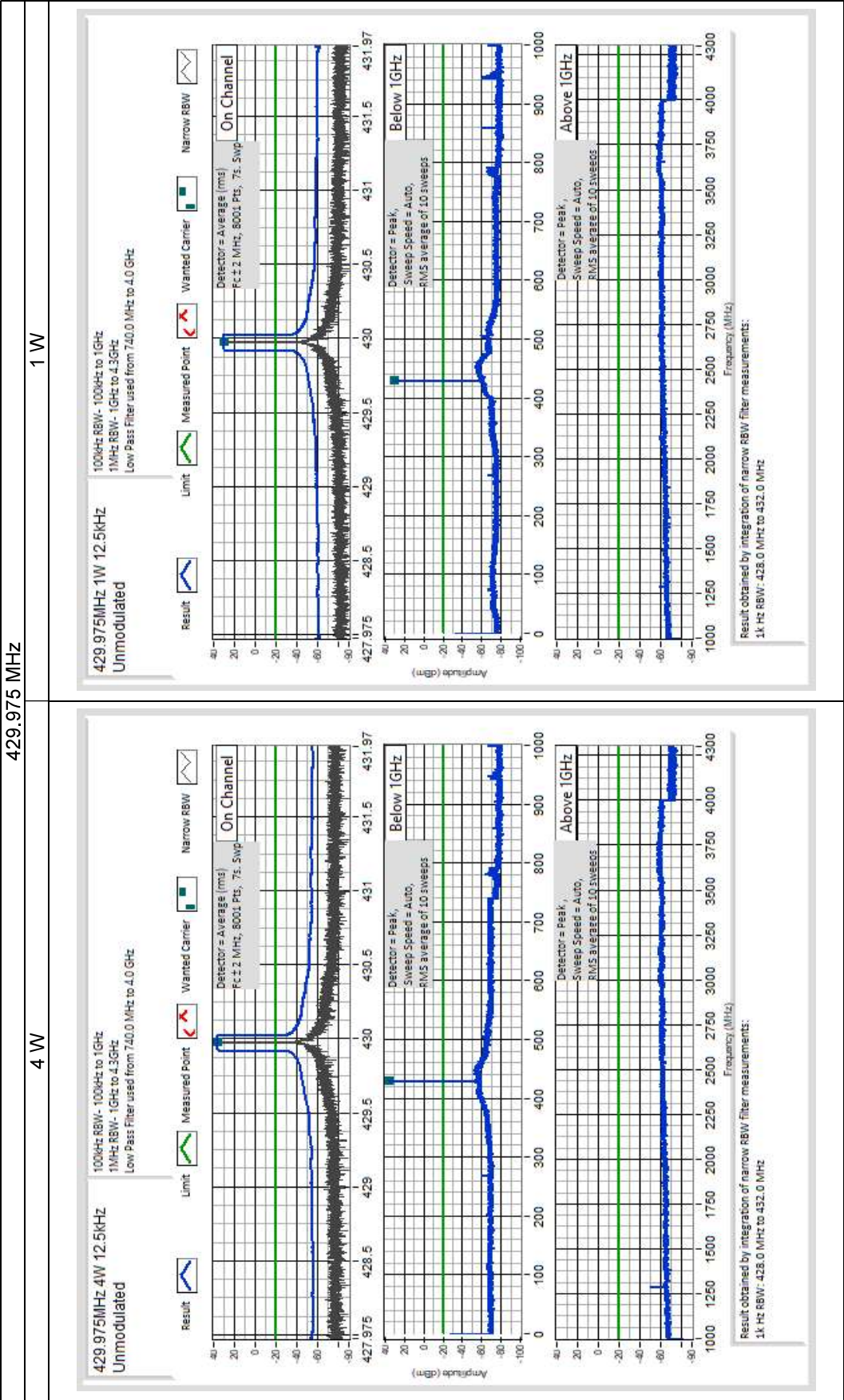
12.5 kHz Channel Spacing

429.975 MHz @ 1 W

Emission Mask D

Emission Frequency (MHz)	Level (dBm)	Level (dBc)
~	~	~
No emissions were detected at a level greater than 20 dB below the limit.		

Spurious Emissions (Tx Conducted)



Spurious Emissions (Tx Conducted)

SPECIFICATION: FCC 47 CFR 2.1051

RSS-119 5.8

12.5 kHz Channel Spacing

450.025 MHz @ 4 W

Emission Mask D

Emission Frequency (MHz)	Level (dBm)	Level (dBc)
~	~	~

12.5 kHz Channel Spacing

450.025 MHz @ 1 W

Emission Mask D

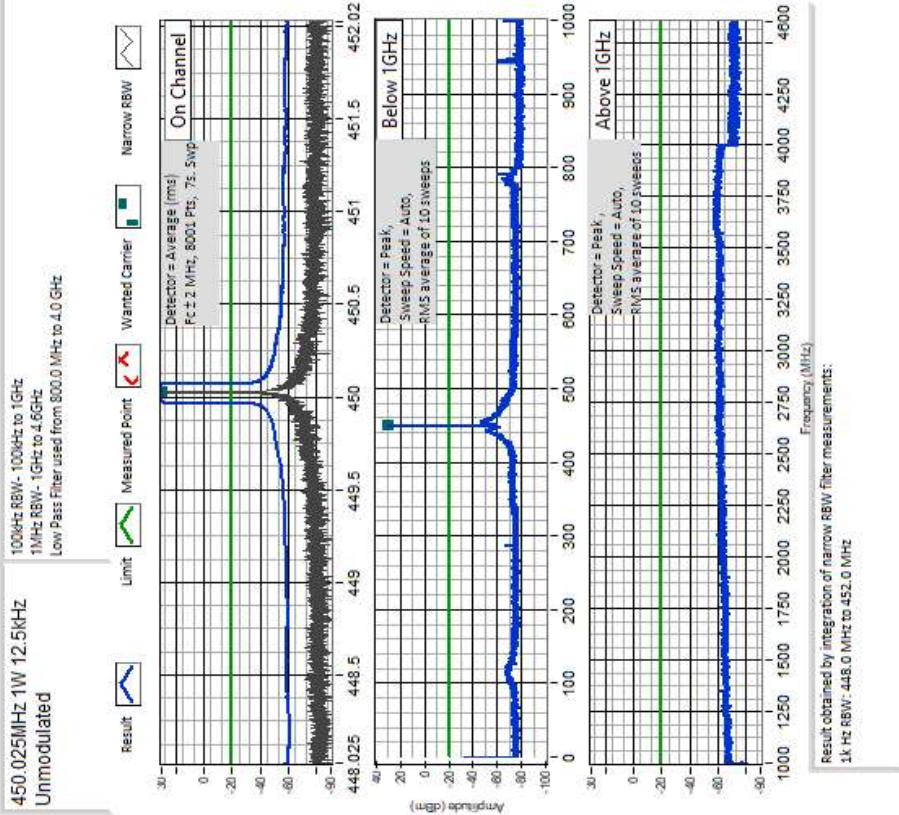
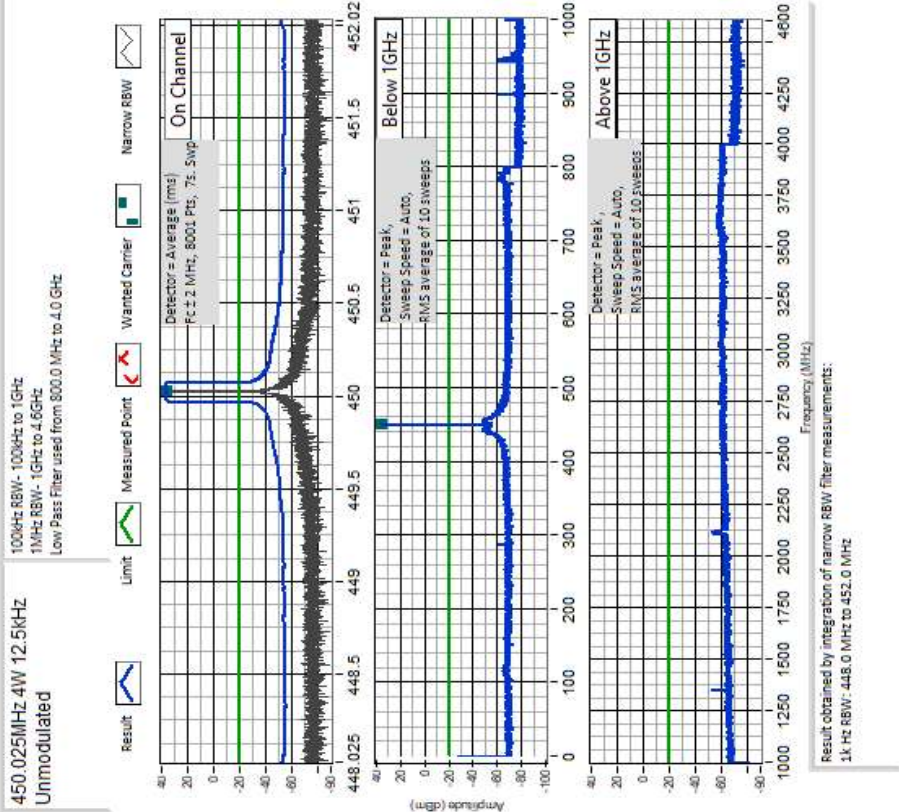
Emission Frequency (MHz)	Level (dBm)	Level (dBc)
~	~	~
No emissions were detected at a level greater than 20 dB below the limit.		

Spurious Emissions (Tx Conducted)

450.025 MHz

4 W

1 W



Spurious Emissions (Tx Conducted)

SPECIFICATION: FCC 47 CFR 2.1051

RSS-119 5.8

12.5 kHz Channel Spacing

460.025 MHz @ 4 W

Emission Mask D

Emission Frequency (MHz)	Level (dBm)	Level (dBc)
~	~	~

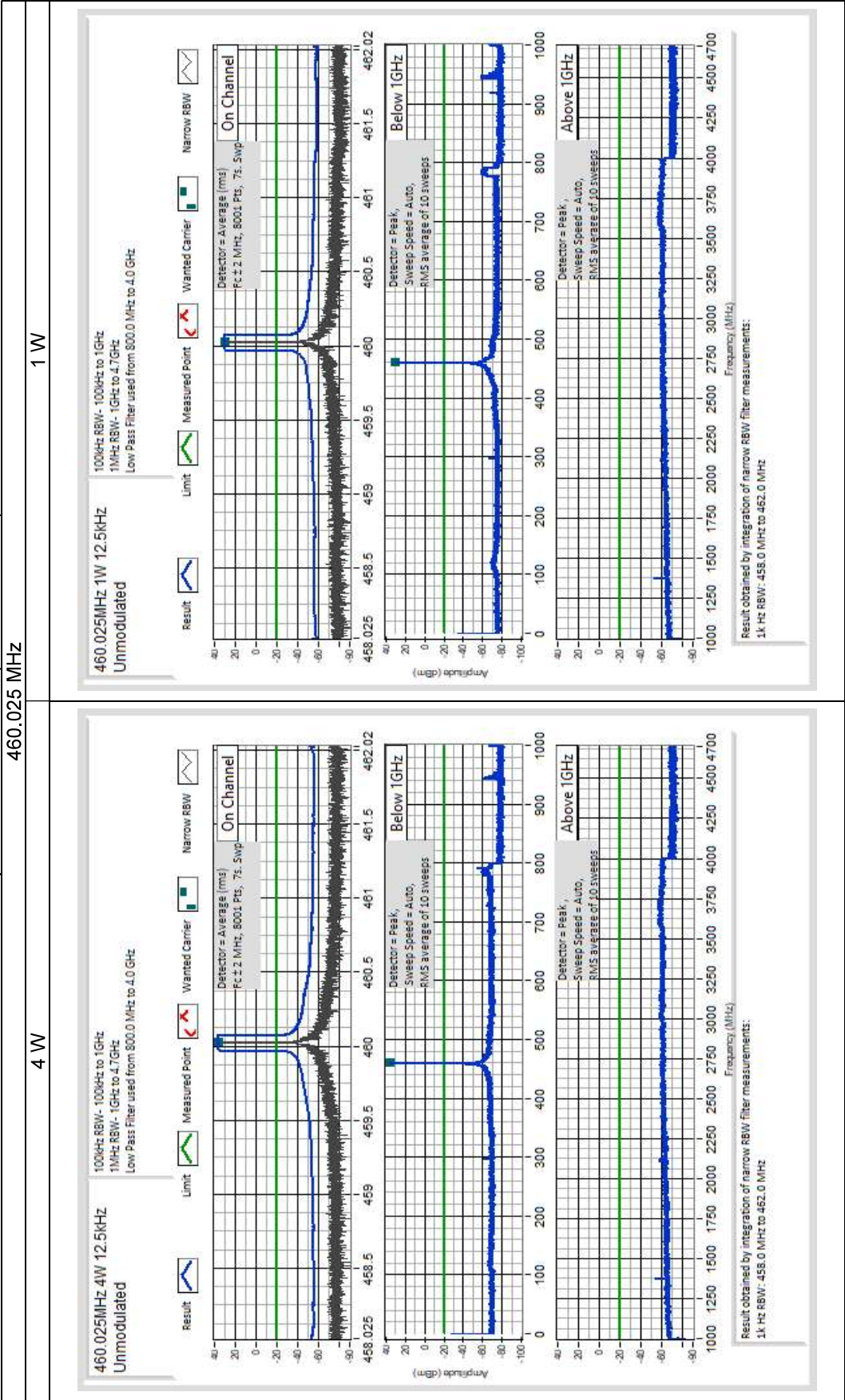
12.5 kHz Channel Spacing

460.025 MHz @ 1 W

Emission Mask D

Emission Frequency (MHz)	Level (dBm)	Level (dBc)
~	~	~
No emissions were detected at a level greater than 20 dB below the limit.		

Spurious Emissions (Tx Conducted)



Spurious Emissions (Tx Conducted)

SPECIFICATION: FCC 47 CFR 2.1051

RSS-119 5.8

12.5 kHz Channel Spacing

469.975 MHz @ 4 W

Emission Mask D

Emission Frequency (MHz)	Level (dBm)	Level (dBc)
~	~	~

12.5 kHz Channel Spacing

469.975 MHz @ 1 W

Emission Mask D

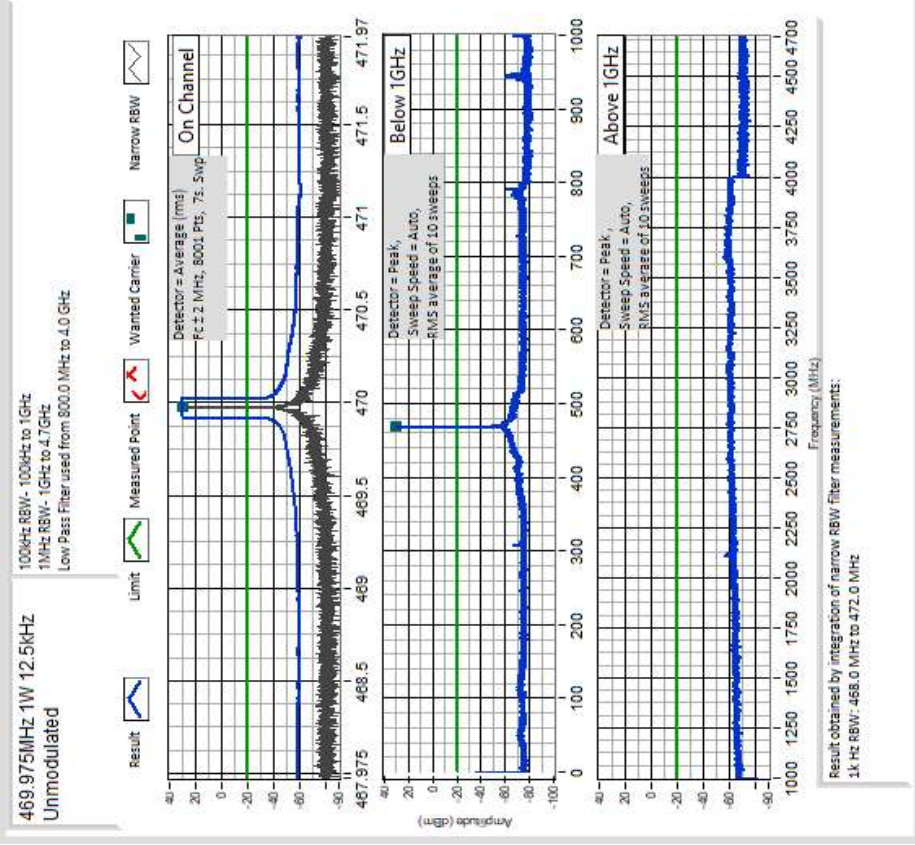
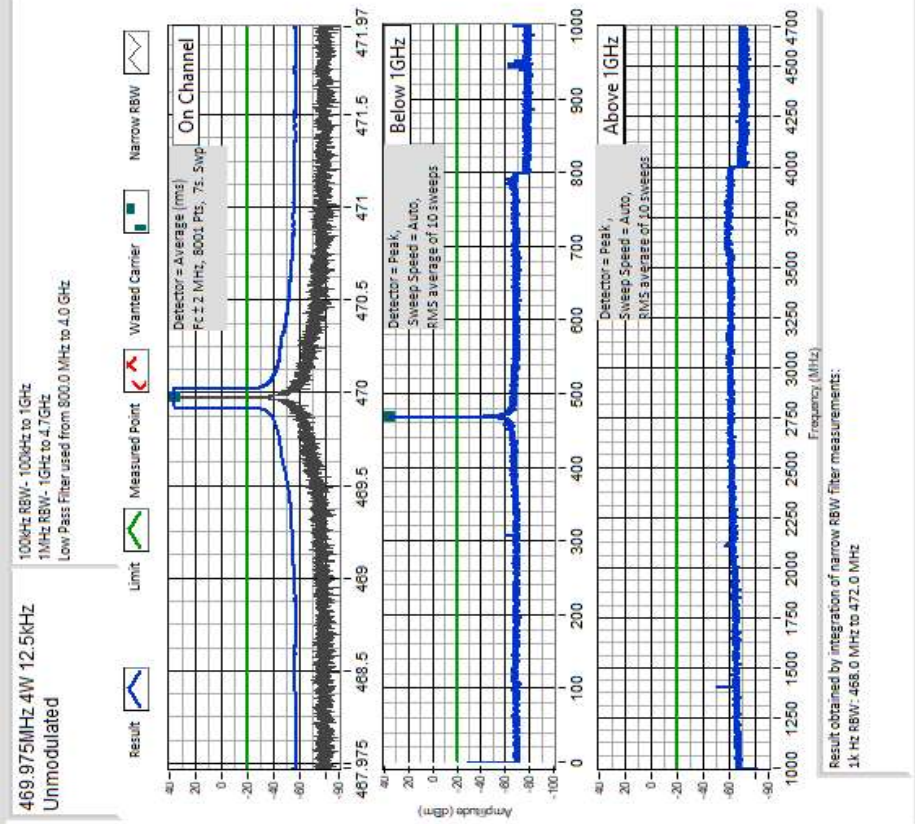
Emission Frequency (MHz)	Level (dBm)	Level (dBc)
~	~	~
No emissions were detected at a level greater than 20 dB below the limit.		

Spurious Emissions (Tx Conducted)

469.975 MHz

4 W

1 W



Spurious Emissions (Tx Conducted)

SPECIFICATION: FCC 47 CFR 2.1051

RSS-119 5.8

12.5 kHz Channel Spacing

479.975 MHz @ 4 W

Emission Mask D

Emission Frequency (MHz)	Level (dBm)	Level (dBc)
~	~	~

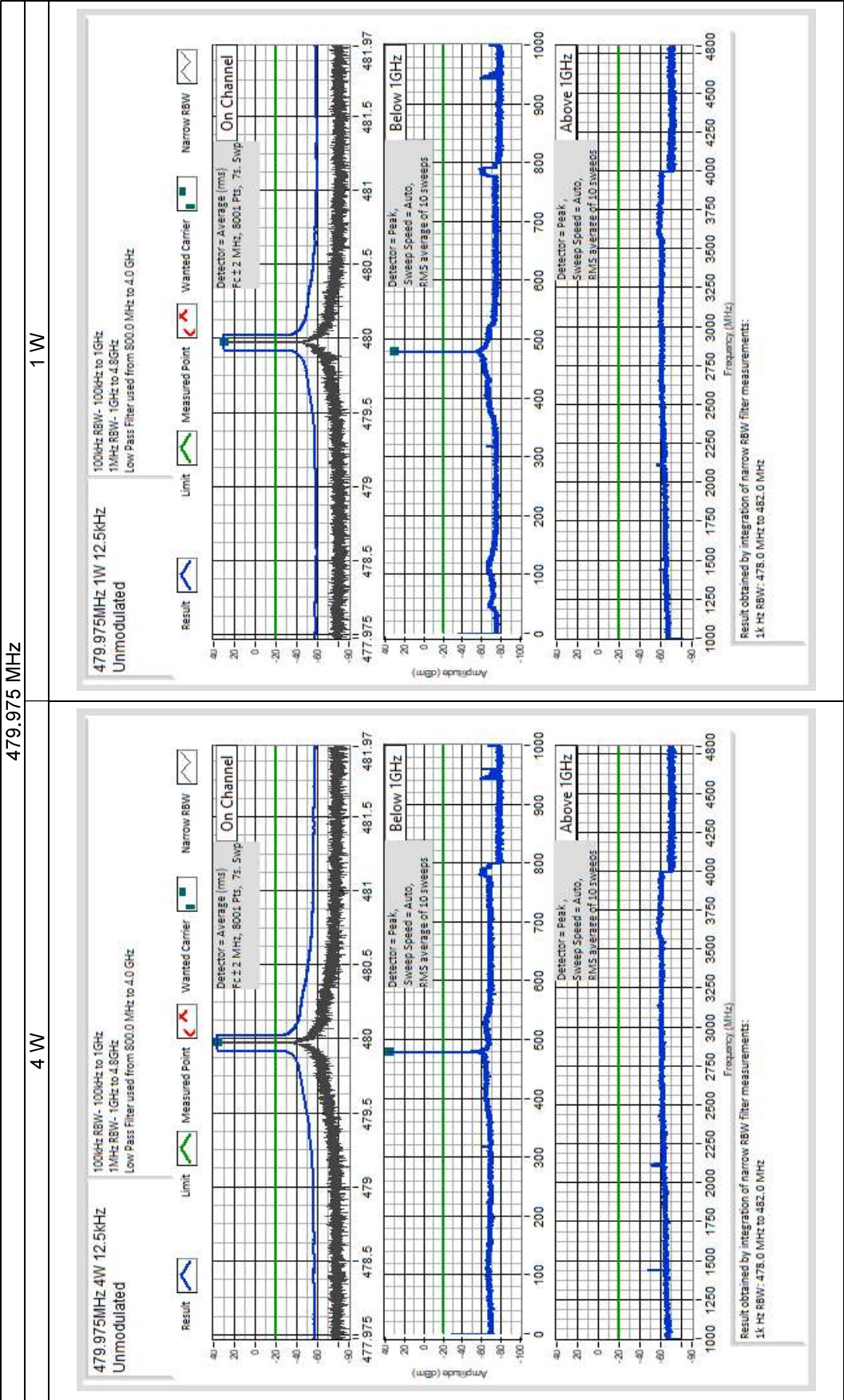
12.5 kHz Channel Spacing

479.975 MHz @ 1 W

Emission Mask D

Emission Frequency (MHz)	Level (dBm)	Level (dBc)
~	~	~
No emissions were detected at a level greater than 20 dB below the limit.		

Spurious Emissions (Tx Conducted)



Spurious Emissions (Tx Conducted)

SPECIFICATION: FCC 47 CFR 2.1051

RSS-119 5.8

LIMITS: FCC 47 CFR 90.210

RSS-119 5.8

Carrier Output Power	Emission Mask D 12.5 kHz Channel Spacing $50 + 10 \log_{10}(P_{\text{Watts}})$	
	-20 dBm	-56 dBc
4 W	-20 dBm	-56 dBc
1 W	-20 dBm	-50 dBc

TRANSMITTER SPURIOUS EMISSIONS (RADIATED)

SPECIFICATION: FCC 47 CFR 2.1053

GUIDE: ANSI C63.26 5.5.3

MEASUREMENT PROCEDURE:

Initial Scan:

1. The EUT is placed in the S-Line TEM cell and emissions are measured from 30 MHz to 700 MHz. Any emission within 20 dB of the limit is then re-tested on the OATS.
2. The EUT is placed in the reverberation chamber and emissions are measured from 700 MHz to the upper frequency required ($10 \times F_c$). Any emission within 20 dB of the limit is then re-tested on the OATS.
3. The harmonics emissions up to the 6th harmonic of the fundamental frequency are measured on the OATS

OATS Measurement:

1. The EUT is placed on a wooden turntable at a distance of three metres from the test antenna. The output terminal is connected to an RF dummy load.
2. The test antenna is raised from 1 m to 4 m to obtain a maximum reading; the turntable is then rotated through 360° to obtain the maximum response of each spurious emission. Valid emissions are determined by switching the EUT on and off.
3. The EUT is then replaced by a signal generator and substitution antenna to make measurements by the substitution method.

MEASUREMENT UNCERTAINTY: ≤ 12.75 GHz ± 4.6 dB

MEASUREMENT RESULTS:

See the tables on the following pages

Spurious Emissions (Tx Radiated) – Continued

SPECIFICATION: FCC 47 CFR 2.1053

12.5 kHz Channel Spacing 406.125 MHz @ 4 W Emission Mask D

Emission Frequency (MHz)	Level (dBm)	Level (dBc)
~	~	~

12.5 kHz Channel Spacing 406.125 MHz @ 1 W Emission Mask D

Emission Frequency (MHz)	Level (dBm)	Level (dBc)
~	~	~
No emissions were detected at a level greater than 20 dB below the limit.		

12.5 kHz Channel Spacing 418.025 MHz @ 4 W Emission Mask D

Emission Frequency (MHz)	Level (dBm)	Level (dBc)
~	~	~

12.5 kHz Channel Spacing 418.025 MHz @ 1 W Emission Mask D

Emission Frequency (MHz)	Level (dBm)	Level (dBc)
~	~	~
No emissions were detected at a level greater than 20 dB below the limit.		

12.5 kHz Channel Spacing 429.975 MHz @ 4 W Emission Mask D

Emission Frequency (MHz)	Level (dBm)	Level (dBc)
~	~	~

12.5 kHz Channel Spacing 429.975 MHz @ 1 W Emission Mask D

Emission Frequency (MHz)	Level (dBm)	Level (dBc)
~	~	~
No emissions were detected at a level greater than 20 dB below the limit.		

Spurious Emissions (Tx Radiated) – Continued

12.5 kHz Channel Spacing 450.025 MHz @ 4 W Emission Mask D

Emission Frequency (MHz)	Level (dBm)	Level (dBc)
~	~	~

12.5 kHz Channel Spacing 450.025 MHz @ 1 W Emission Mask D

Emission Frequency (MHz)	Level (dBm)	Level (dBc)
~	~	~
No emissions were detected at a level greater than 20 dB below the limit.		

12.5 kHz Channel Spacing 460.025 MHz @ 4 W Emission Mask D

Emission Frequency (MHz)	Level (dBm)	Level (dBc)
~	~	~

12.5 kHz Channel Spacing 460.025 MHz @ 1 W Emission Mask D

Emission Frequency (MHz)	Level (dBm)	Level (dBc)
~	~	~
No emissions were detected at a level greater than 20 dB below the limit.		

12.5 kHz Channel Spacing 469.975 MHz @ 4 W Emission Mask D

Emission Frequency (MHz)	Level (dBm)	Level (dBc)
~	~	~

12.5 kHz Channel Spacing 469.975 MHz @ 1 W Emission Mask D

Emission Frequency (MHz)	Level (dBm)	Level (dBc)
~	~	~
No emissions were detected at a level greater than 20 dB below the limit.		

Spurious Emissions (Tx Radiated) – Continued

12.5 kHz Channel Spacing

479.975 MHz @ 4 W

Emission Mask D

Emission Frequency (MHz)	Level (dBm)	Level (dBc)
~	~	~

12.5 kHz Channel Spacing

479.975 MHz @ 1 W

Emission Mask D

Emission Frequency (MHz)	Level (dBm)	Level (dBc)
~	~	~
No emissions were detected at a level greater than 20 dB below the limit.		

LIMITS: FCC 47 CFR 2.1053

Carrier Output Power	Emission Mask D 12.5 kHz Channel Spacing $50 + 10 \log_{10} (P_{\text{Watts}})$	
4 W	-20 dBm	-56 dBc
1 W	-20 dBm	-50 dBc