## **EXHIBIT 6**

## **INDEX OF SUBMITTED MEASURED DATA**

This exhibit contains the measured data for this equipment as follows:

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### EXHIBIT 6B - Transmit Audio Response

6B-1 - 467.775 MHz, 12.5 kHz Channel Spacing

6B-2 - 467.775 MHz, 25 kHz Channel Spacing

#### **EXHIBIT 6C** - Transmit Audio Low pass Filter Response

6C-1 - 467.775 MHz,12.5 kHz Transmit Audio LPF Response

6C-2 - 467.775 MHz,25 kHz Transmit Audio LPF Response

#### **EXHIBIT 6D** - Modulation Limiting Characteristics

6D-1 - 467.775 MHz,12.5 kHz Carrier Squelch Mode

6D-2 - 467.775 MHz,25 kHz Carrier Squelch Mode

#### **EXHIBIT 6E** – Modulation Techniques and Occupied Bandwidth

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6E-2: 406.2 MHz, O.153 Test Pattern 4FSK Voice and Data Modulation, 7K60F1W Mask D

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6E-4: 406.2 MHz, O.153 Test Pattern 4FSK Voice Modulation only, 7K60F1E Mask D

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6E-6: 450.65 MHz, O.153 Test Pattern 4FSK Voice and Data Modulation, 7K60F1W Mask D

6E-7: 450.65 MHz, O.153 Test Pattern 4FSK Data Modulation only, 7K60F1D Mask D

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6E-9: 459.125 MHz, 12.5 kHz Channel Spacing, 2500Hz Audio Modulation only, 11K0F3E Mask D

6E-10: 467.775 MHz, 12.5 kHz Channel Spacing, 2500Hz Audio Modulation only, 11K0F3E Mask D

6E-11: 469.9875 MHz, 12.5 kHz Channel Spacing, 2500Hz Audio Modulation only, 11K0F3E Mask D

6E-12: 469.9875 MHz, O.153 Test Pattern 4FSK Voice and Data Modulation, 7K60F1W Mask D

6E-13: 469.9875 MHz, O.153 Test Pattern 4FSK Data Modulation only, 7K60F1D Mask D

6E-14: 469.9875 MHz, O.153 Test Pattern 4FSK Voice Modulation only, 7K60F1E Mask D

6E-15: 406.2 MHz, 25 kHz Channel Spacing, 2500Hz Audio Modulation only, 16K0F3E Mask B (Not for FCC Review)

6E-16: 450.65 MHz, 25 kHz Channel Spacing, 2500Hz Audio Modulation only, 16K0F3E Mask B, Mask 74.462(c)

6E-17: 459.125 MHz, 25 kHz Channel Spacing, 2500Hz Audio Modulation only, 16K0F3E Mask B, FCC Part 22 Limit

6E-18: 467.775 MHz, 25 kHz Channel Spacing, 2500Hz Audio Modulation only, 16K0F3E Mask B, Mask 80.211(f)

6E-19: 469.9875 MHz, 25 kHz Channel Spacing, 2500Hz Audio Modulation only, 16K0F3E Mask B (Not for FCC Review)

6E-20: 467.775 MHz, 25 kHz Channel Spacing, 2500Hz Audio Modulation only, 16K0F3E Mask 80.211(c)

#### **EXHIBIT 6F** - Conducted Spurious Emissions

6F-1 - 30 Watts, 406.2 MHz, 25 kHz Channel Spacing (Not for FCC Review)

6F-2 - 30 Watts, 450.025 MHz, 25 kHz Channel Spacing

6F-3 - 30 Watts, 459.125 MHz, 25 kHz Channel Spacing

6F-4 -30 Watts, 467.775 MHz, 25 kHz Channel Spacing

6F-5 - 1 Watts, 450.025 MHz, 25 kHz Channel Spacing

6F-6 - 1 Watts, 467.775 MHz, 25 kHz Channel Spacing

6F-7 - 30 Watts, 406.2 MHz, Digital 12.5 kHz Channel Spacing

6F-8 - 30 Watts, 450.025 MHz, Digital 12.5 kHz Channel Spacing

6F-9 - 30 Watts, 459.125 MHz, Digital 12.5 kHz Channel Spacing

6F-10 - 30 Watts, 467.775 MHz, Digital 12.5 kHz Channel Spacing

6F-11 - 1 Watts, 450.025 MHz, Digital 12.5 kHz Channel Spacing

6F-12 - 1 Watts, 467.775 MHz, Digital 12.5 kHz Channel Spacing

#### **EXHIBIT 6G** - Radiated Spurious Emissions

- 6G-1 30 Watts, 406.2 MHz, 12.5 kHz Channel Spacing
- 6G-2 30 Watts, 450.65 MHz, 12.5 kHz Channel Spacing
- 6G-3 30 Watts, 459.125 MHz, 12.5 kHz Channel Spacing
- 6G-4 30 Watts, 467.775 MHz, 12.5 kHz Channel Spacing
- 6G-5 1 Watts, 450.65 MHz, 12.5 kHz Channel Spacing
- 6G-6 1 Watts, 467.775 MHz, 12.5 kHz Channel Spacing
- 6G-7 30 Watts, 406.2 MHz, 25 kHz Channel Spacing (Not for FCC Review)
- 6G-8 30 Watts, 450.65 MHz, 25 kHz Channel Spacing
- 6G-9 30 Watts, 459.125 MHz, 25 kHz Channel Spacing
- 6G-10 30 Watts, 467.775 MHz, 25 kHz Channel Spacing
- 6G-11 1 Watts, 450.65 MHz, 25 kHz Channel Spacing
- 6G-12 1 Watts, 467.775 MHz, 25 kHz Channel Spacing

#### **EXHIBIT 6H** – Frequency Stability

- 6H-1 467.775 MHz Frequency Stability vs. Temperature
- 6H-2 467.775 MHz Frequency Stability vs. Voltage

### **EXHIBIT 6I** – Transient Frequency Behavior

- 6I-1 467.775 MHz, 12.5 kHz Channel Spacing Key-Up Attack Time
- 6I-2 467.775 MHz, 12.5 kHz Channel Spacing De-Key Decay Time
- 6I-3 467.775MHz, 25 kHz Channel Spacing Key-Up Attack Time
- 6I-4 467.775MHz, 25 kHz Channel Spacing De-Key Decay Time

Radio model tested: AAM28QNN9RA1AN

Important Note: The data in this test report meets or exceeds the technical requirements of FCC Rule Parts 22, 74, 80 and 90.

<sup>\*\*</sup> Please note that the above data were taken following the procedures and limits outlined in TIA 603-D and RSS 119 during the month of October 2015. See Table 2 in Ex07\_test\_procedures

#### **EXHIBIT 6A - RF POWER OUTPUT**

## HIGH POWER SETTING, FREQUENCY 406.2 MHz

Measured RF Output Power:29.5 WattsMeasured DC Voltage:13.2 VoltsMeasured DC Input Current:5.03 Amperes

## **LOW POWER SETTING, FREQUENCY 406.2 MHz**

Measured RF Output Power:

Measured DC Voltage:

Measured DC Input Current:

0.96 Watts

13.2 Volts

1.53 Amperes

### HIGH POWER SETTING, FREQUENCY 450.65 MHz

Measured RF Output Power:29.9 WattsMeasured DC Voltage:13.2 VoltsMeasured DC Input Current:5.0 Amperes

## **LOW POWER SETTING, FREQUENCY 450.65 MHz**

Measured RF Output Power:0.97 WattsMeasured DC Voltage:13.2 VoltsMeasured DC Input Current:1.61 Amperes

## HIGH POWER SETTING, FREQUENCY 459.125 MHz

Measured RF Output Power:29.8 WattsMeasured DC Voltage:13.2 VoltsMeasured DC Input Current:5.57 Amperes

#### **LOW POWER SETTING, FREQUENCY 459.65 MHz**

Measured RF Output Power:0.97 WattsMeasured DC Voltage:13.2 VoltsMeasured DC Input Current:1.63 Amperes

# HIGH POWER SETTING, FREQUENCY 467.775 MHz

Measured RF Output Power: 29.9 Watts
Measured DC Voltage: 13.2 Volts
Measured DC Input Current: 5.4 Amperes

## **LOW POWER SETTING, FREQUENCY 467.775 MHz**

Measured RF Output Power:0.97 WattsMeasured DC Voltage:13.2 VoltsMeasured DC Input Current:1.62 Amperes

## HIGH POWER SETTING, FREQUENCY 469.9875 MHz

Measured RF Output Power:29.6 WattsMeasured DC Voltage:13.2 VoltsMeasured DC Input Current:5.32 Amperes

## **LOW POWER SETTING, FREQUENCY 469.9875 MHz**

Measured RF Output Power:0.98 WattsMeasured DC Voltage:13.2 VoltsMeasured DC Input Current:1.61 Amperes

## **EXHIBIT 6B - Transmit Audio Response**

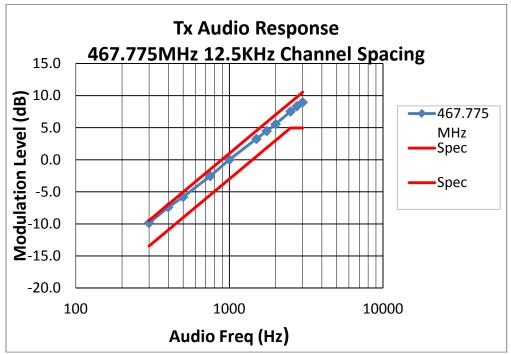


Figure 6B-1: 467.775 MHz, 12.5 kHz Channel Spacing, Transmit Audio Frequency Response

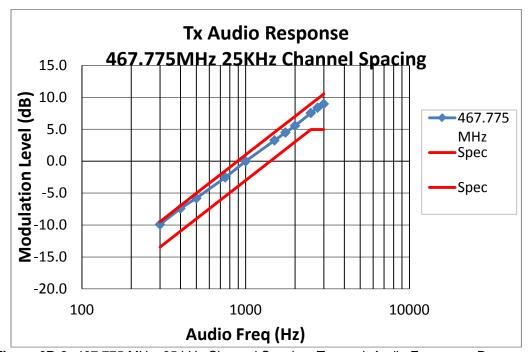


Figure 6B-2: 467.775 MHz, 25 kHz Channel Spacing, Transmit Audio Frequency Response

## EXHIBIT 6C - Transmit Audio Post Limiter Low Pass Filter Response

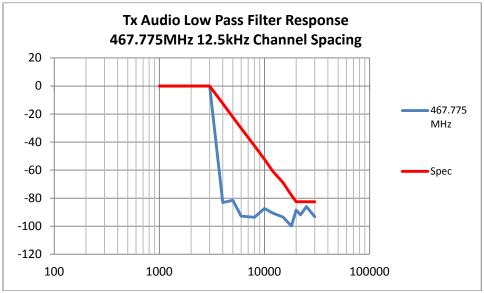


Figure 6C-1: 467.775 MHz, 12.5 kHz Channel Spacing, Transmit Audio Low Pass Filter Response

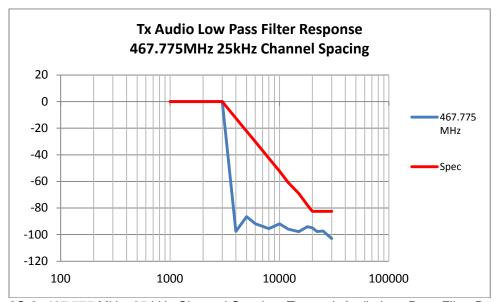


Figure 6C-2: 467.775 MHz, 25 kHz Channel Spacing, Transmit Audio Low Pass Filter Response

## **EXHIBIT 6D – Modulation Limiting Characteristic**

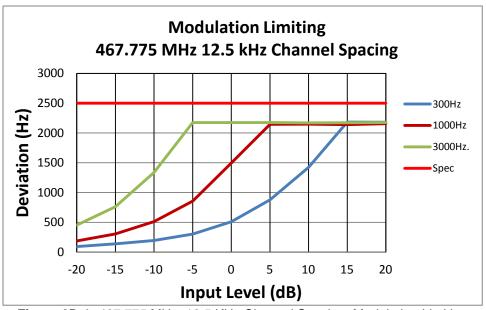


Figure 6D-1: 467.775 MHz, 12.5 KHz Channel Spacing, Modulation Limiting

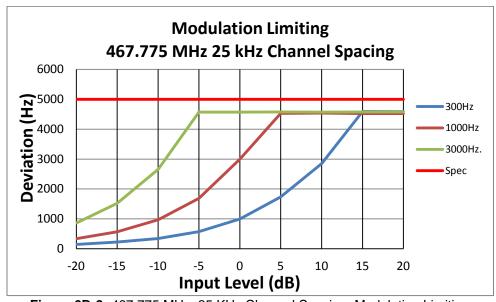


Figure 6D-2: 467.775 MHz, 25 KHz Channel Spacing, Modulation Limiting

## **EXHIBIT 6E - Modulation Techniques**

The transmitter is capable of the following types of modulation:

- i) Modulation of PL (Private Line) Direct FM tone modulation of 67 Hz to 250.3 Hz at 15% of full system deviation. Also referred to as TPL (Tone Private Line).
- ii) Modulation of DPL (Digital Private Line) Direct FM modulation at 134 bps at 15% of full system deviation.
- iii) Modulation of 2000/3000 Hz FSK Data FM modulation at nominally 60% of full system deviation.
- iv) Modulation of DTMF (Dual Tone Multi Frequency) FM modulation at nominally 60% of full system deviation
- v) Modulation of 9600 bps 4 level FSK Data

## Standard Audio Modulation (25 kHz Channelization, Analog Voice) (Not for FCC Review)

Per CFR Title 47, Part 2, Section 2.201, the Carson's Rule calculation for necessary bandwidth, BW = 2M + 2DK, where M = maximum modulating frequency in Hz, D = peak deviation in Hz, and K=1, is as follows:

In this case the maximum modulating frequency is 3.0 kHz with a 5.0 kHz deviation.

BW = 2(M+D) = 2\*(3.0 kHz + 5.0 kHz) = 16 kHz (16K0 designator)

Per CFR Title 47, Part 2, Section 2.201:

Frequency Modulation I	F
A single channel containing analogue information	3
Telephony (including sound broadcasting) I	Ε

The complete emissions designator for this transmitter is **16K0F3E**.

Standard Audio Modulation (12.5 kHz Channelization, Analog Voice)

Per CFR Title 47, Part 2, Section 2.201, the Carson's Rule calculation for necessary bandwidth, BW = 2M +2DK, where M = maximum modulating frequency in Hz, D = peak deviation in Hz, and K=1, is as follows:

In this case the maximum modulating frequency is 3.0 kHz with a 2.5 kHz deviation.

BW = 2(M+D) = 2\*(3.0 kHz + 2.5 kHz) = 11 kHz (11K0 designator)

Per CFR Title 47, Part 2, Section 2.201:

Frequency Modulation	F
A single channel containing analogue information	
Telephony (including sound broadcasting)	Ε

The complete emissions designator for this transmitter is 11K0F3E.

### 4 Level FSK Digital Modulation Techniques

The modulation sends 4800 symbols/sec with each symbol conveying 2 bits of information for a data rate of 9600 bps in a 12.5 kHz channel, which is equivalent to 4800 bps per 6.25kHz. The maximum deviation  $\,D$ , of the symbol is defined as:

$$D = 3h/2T$$

where:

h is the deviation index defined for the modulation

T is the symbol time (1/4800) in seconds

The deviation index, h, is 0.27. This yields a symbol deviation of 1.944 kHz at the symbol center. The mapping between symbols and bits is shown below:

Informati	on Bits	Cympal	4FCK Doviction			
Bit 1	Bit 0	Symbol	4FSK Deviation			
0	1	+3	+1.944 kHz			
0	0	+1	+0.648 kHz			
1	0	-1	-0.648 kHz			
1	1	-3	-1.944 kHz			

A Square Root Raised Cosine Filter is implemented for the modulation low pass filter. The input to the modulation low pass filter consists of a series of impulses separated in time by 208.33 microseconds (1/4800 sec). The group delay of the filter is flat over the passband for |f| < 2880 Hz. The magnitude response of the filter is given by the following formula.

|F(f)| = magnitude response of the Square Root Raised Cosine Filter

|F(f)| = 1 for  $|f| \le 1920$  Hz

 $|F(f)| = |\cos(\pi \Box f / 1920)| \text{ for } 1920 \text{ Hz} < |\xi| 2880 \text{ Hz}$ 

 $|F(f)|=0 \ for \ |f|>2880 \ Hz$ 

where f = frequency in hertz.

The 4FSK modulator consists of a Square Root Raised Cosine Filter, cascaded with a frequency modulator.

Dibits	F (f)	Frequency	4FSK
Input	Filter	Modulator	Output

### 4 Level FSK Digital Modulation (12.5 kHz Channelization, Digital Data)

Measurement's per Rule Part 2.202(c)(4) where employed because Part 2.202(g) Table III A formulation produces an excessive result using the value of K recommended in the Table. Therefore, the 99% energy rule (Title 47 CFR 2.989) was used for digital mode and is more accurate than Carson's rule. It states that 99% of the modulation energy falls within X kHz, which in this case is 7.6 kHz (**7K60** designator).

Per CFR Title 47, Part 2, Section 2.201:

Frequency Modulation	F
A single channel containing quantized or digital information	n without the use of a modulating sub-carrier
excluding time-division multiplex	1
Data Transmission, telemetry, telecommand	D

Note: This product utilizes a Time Division Multiple Access (TDMA) protocol.

The complete emissions designator for this transmitter is **7K60F1D**.

## 4 Level FSK Digital Modulation (12.5 kHz Channelization, Digital Voice)

Measurement's per Rule Part 2.202(c)(4) where employed because Part 2.202(g) Table III A formulation produces an excessive result using the value of K recommended in the Table. Therefore the 99% energy rule

(title 47CFR2.989) was used for digital mode and is more accurate than Carson's rule. It states that 99% of the modulation energy falls within X kHz, which in this case is 7.6 kHz (**7K60** designator).

Per CFR Title 47, Part 2, Section 2.201:

Frequency Modulation	F
A single channel containing quantized or digital	al information without the use of a modulating sub-carrier
excluding time-division multiplex	1
Telephony (including sound broadcasting)	E

Note: This product utilizes a Time Division Multiple Access (TDMA) protocol.

The complete emissions designator for this transmitter is **7K60F1E**.

#### Digital (12.5 kHz Channelization, Digital TDMA)

Measurement's per Rule Part 2.202(c)(4) where employed because Part 2.202(g) Table III A formulation produces an excessive result using the value of K recommended in the Table. Therefore the 99% energy rule (title 47CFR2.989) was used for digital mode and is more accurate than Carson's rule. It states that 99% of the modulation energy falls within X kHz, which in this case is 7.6 kHz (**7K60** designator).

Per CFR Title 47, Part 2, Section 2.201:

Frequency Modulation	F
A single channel containing quantized or digital informati	on without the use of a modulating sub-carrie
excluding time-division multiplex	1
Combination of Data Transmission, telemetry, telecomma	and (D), and Telephony (E) <b>W</b>

Note: This product utilizes a Time Division Multiple Access (TDMA) protocol.

The complete emissions designator for this transmitter is 7K60F1W.

## <u>Digital Modulation (12.5 kHz Channelization, Digital Data)</u>

Measurement's per Rule Part 2.202(c)(4) where employed because Part 2.202(g) Table III A formulation produces an excessive result using the value of K recommended in the Table. Therefore, the 99% energy rule (Title 47 CFR 2.989) was used for digital mode and is more accurate than Carson's rule. It states that 99% of the modulation energy falls within X kHz, which in this case is 7.6 kHz (**7K60** designator).

Per CFR Title 47, Part 2, Section 2.201:

Frequency Modulation I	F
Case not otherwise covered	X
Data Transmission, telemetry, telecommand	D

Note: This product utilizes a Time Division Multiple Access (TDMA) protocol.

The complete emissions designator for this transmitter is **7K60FXD**.

#### Digital Modulation (12.5 kHz Channelization, Digital Voice)

Measurement's per Rule Part 2.202(c)(4) where employed because Part 2.202(g) Table III A formulation produces an excessive result using the value of K recommended in the Table. Therefore the 99% energy rule (title 47CFR2.989) was used for digital mode and is more accurate than Carson's rule. It states that 99% of the modulation energy falls within X kHz, which in this case is 7.6 kHz (**7K60** designator).

Per CFR Title 47, Part 2, Section 2.201:

Frequency Modulation	F
Case not otherwise covered	X
Telephony (including sound broadcasting)	Ε

Note: This product utilizes a Time Division Multiple Access (TDMA) protocol.

The complete emissions designator for this transmitter is **7K60FXE**.

## **OCCUPIED BANDWIDTH MEASUREMENT**

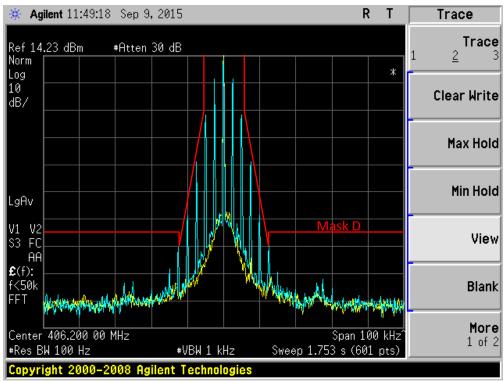


Figure 6E-1: 406.2 MHz, 12.5 kHz Channel Spacing, 2500Hz Audio Modulation only, 11K0F3E Mask D

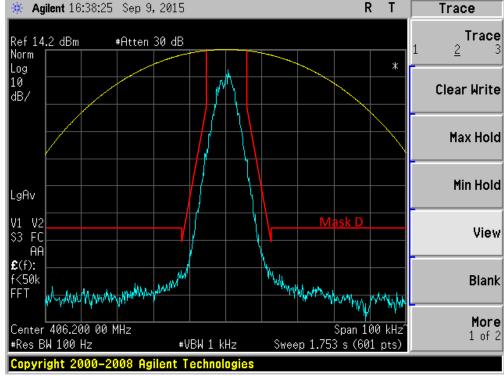


Figure 6E-2: 406.2 MHz, O.153 Test Pattern 4FSK Voice and Data Modulation, 7K60F1W Mask D

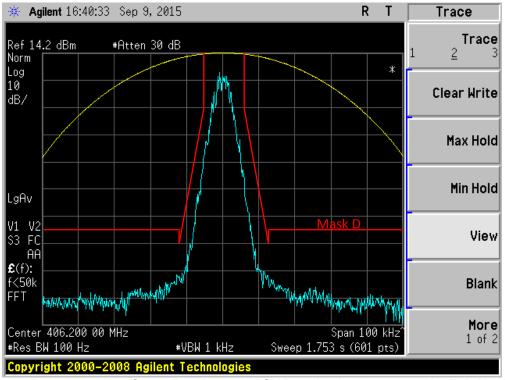


Figure 6E-3: 406.2 MHz, O.153 Test Pattern 4FSK Data Modulation only, 7K60F1D Mask D

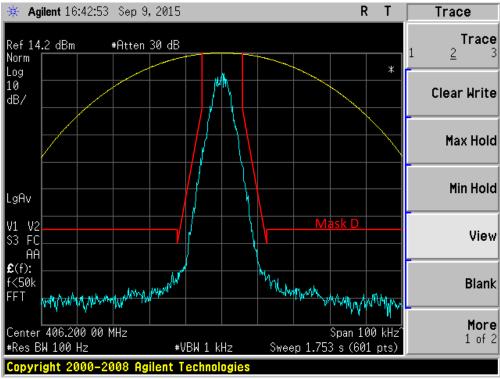


Figure 6E-4: 406.2 MHz, O.153 Test Pattern 4FSK Voice Modulation only, 7K60F1E Mask D

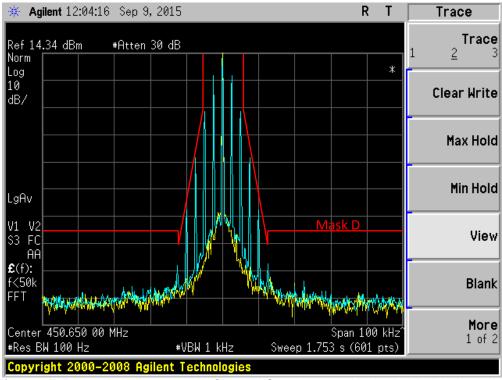


Figure 6E-5: 450.65 MHz, 12.5 kHz Channel Spacing, 2500Hz Audio Modulation only, 11K0F3E Mask D

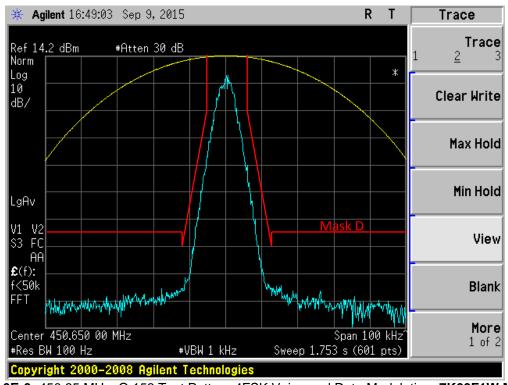


Figure 6E-6: 450.65 MHz, O.153 Test Pattern 4FSK Voice and Data Modulation, 7K60F1W Mask D

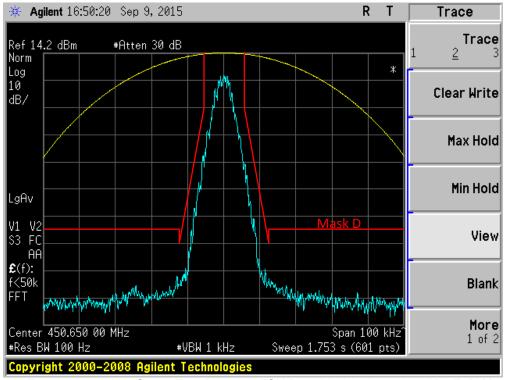


Figure 6E-7: 450.65 MHz, O.153 Test Pattern 4FSK Data Modulation only, 7K60F1D Mask D

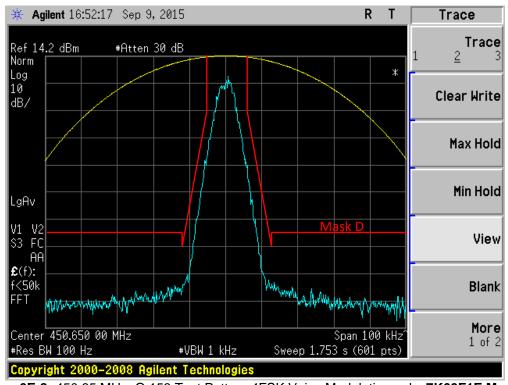


Figure 6E-8: 450.65 MHz, O.153 Test Pattern 4FSK Voice Modulation only, 7K60F1E Mask D

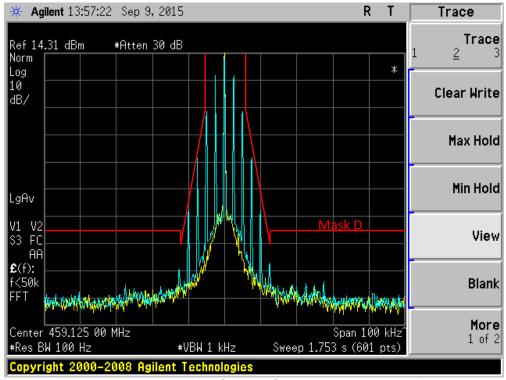


Figure 6E-9: 459.125 MHz, 12.5 kHz Channel Spacing, 2500Hz Audio Modulation only, 11K0F3E Mask D

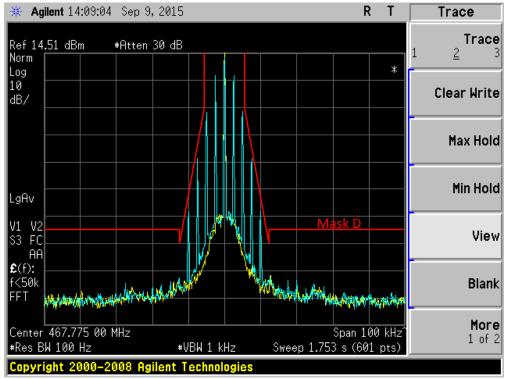


Figure 6E-10: 467.775 MHz, 12.5 kHz Channel Spacing, 2500Hz Audio Modulation only, 11K0F3E Mask D

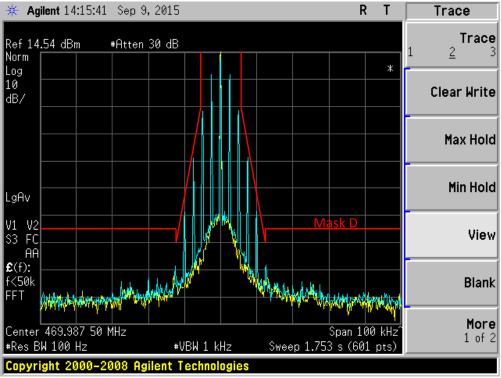


Figure 6E-11: 469.9875 MHz, 12.5 kHz Channel Spacing, 2500Hz Audio Modulation only, 11K0F3E Mask D

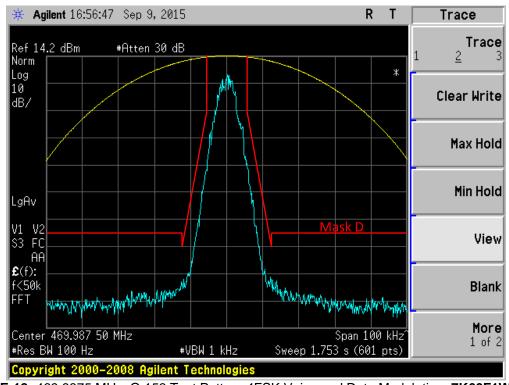


Figure 6E-12: 469.9875 MHz, O.153 Test Pattern 4FSK Voice and Data Modulation, 7K60F1W Mask D

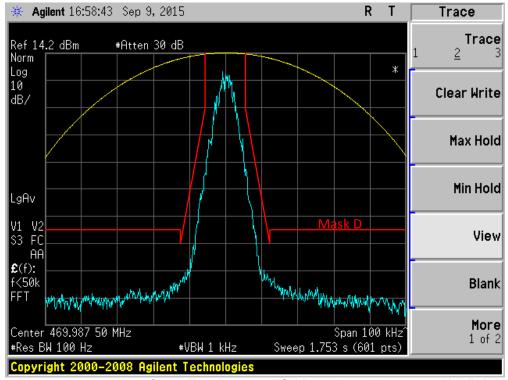


Figure 6E-13: 469.9875 MHz, O.153 Test Pattern 4FSK Data Modulation only, 7K60F1D Mask D

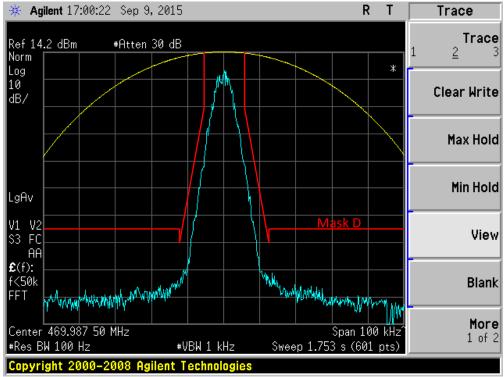


Figure 6E-14: 469.9875 MHz, O.153 Test Pattern 4FSK Voice Modulation only, 7K60F1E Mask D

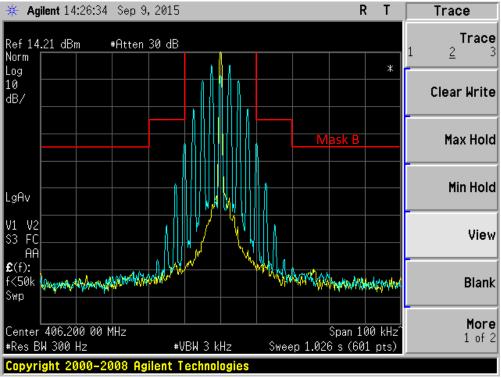


Figure 6E-15: 406.2 MHz, 25 kHz Channel Spacing, 2500Hz Audio Modulation only, 16K0F3E Mask B (Not for FCC Review)

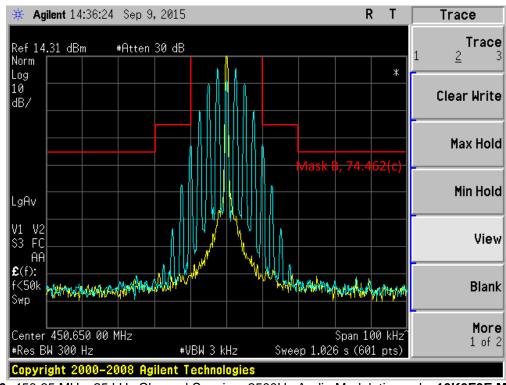


Figure 6E-16: 450.65 MHz, 25 kHz Channel Spacing, 2500Hz Audio Modulation only, 16K0F3E Mask B, Mask 74.462(c)

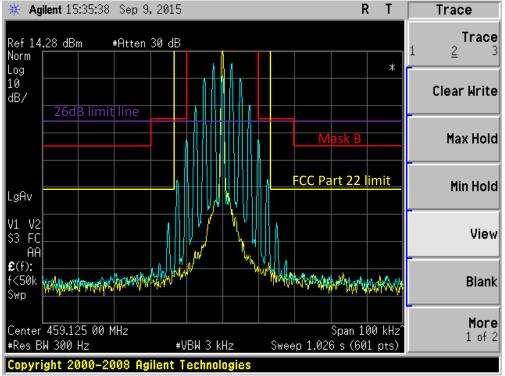


Figure 6E-17: 459.125 MHz, 25 kHz Channel Spacing, 2500Hz Audio Modulation only, 16K0F3E Mask B, FCC Part 22 Limit

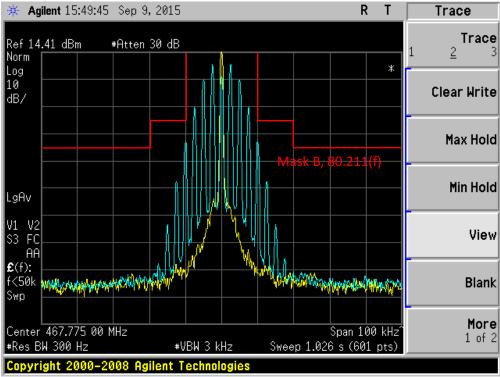


Figure 6E-18: 467.775 MHz, 25 kHz Channel Spacing, 2500Hz Audio Modulation only, 16K0F3E Mask B, Mask 80.211(f)

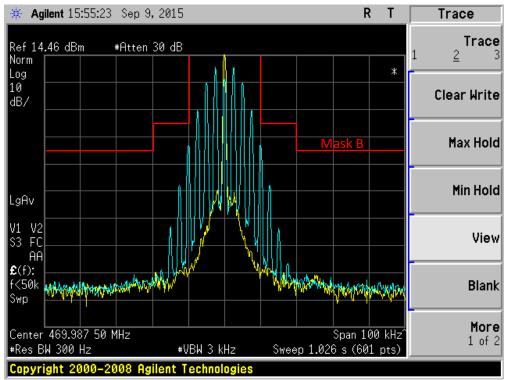


Figure 6E-19: 469.9875 MHz, 25 kHz Channel Spacing, 2500Hz Audio Modulation only, 16K0F3E Mask B (Not for FCC Review)

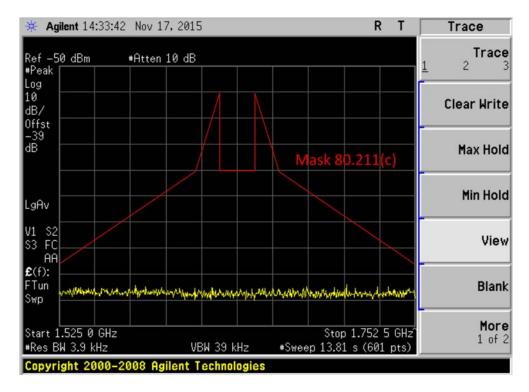


Figure 6E-20: 467.775 MHz, 25 kHz Channel Spacing, 2500Hz Audio Modulation only, 16K0F3E Mask 80.211(c)

#### \*\*NOTE:-

- For 4FSK Digital Modulation, 12.5 kHz Data 7K60F1D & 7K60FXD would be the same. Therefore only measurements with 7K60F1D shown above.
- For 4FSK Digital Modulation, 12.5 kHz Voice 7K60F1E & 7K60FXE would be the same. Therefore only measurements with 7K60F1E shown above.
- All measurements of Occupied Bandwidth which are shown on the above plots are measured using a Spectrum Analyzer
- Measurement using a Spectrum Analyzer must use a 30dB attenuation in order to avoid damage to it
- Therefore the reference power level (Ref) shown on each plot refers to its true power level

## **EXHIBIT 6F - Transmitter Conducted Spurious Emissions**

Note: Display lines on graphs correspond to the FCC limit of – 13dBm (25 kHz) & -20dBm (12.5 kHz).

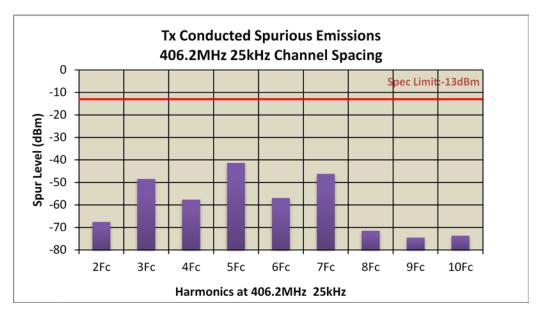


Figure 6F-1: 30 W Harmonic of Carrier 406.2 MHz, 25 kHz Channel Spacing (Not for FCC Review)

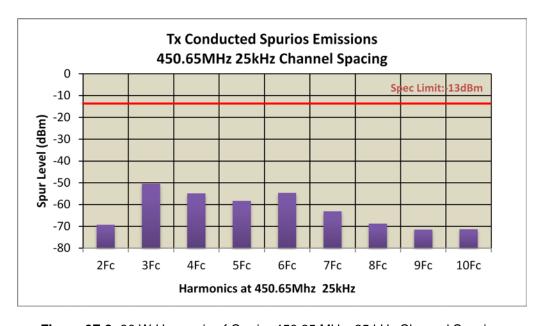


Figure 6F-2: 30 W Harmonic of Carrier 450.65 MHz, 25 kHz Channel Spacing

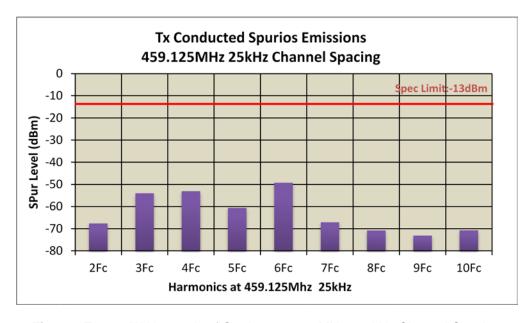


Figure 6F-3: 30 W Harmonic of Carrier 459.125 MHz, 25 kHz Channel Spacing

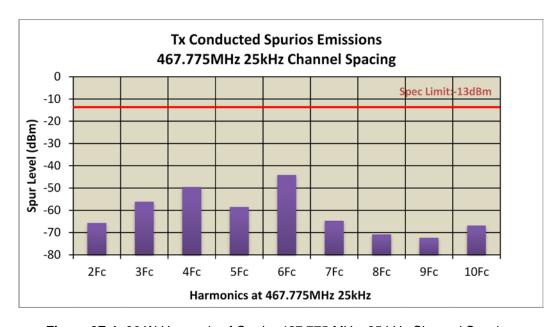


Figure 6F-4: 30 W Harmonic of Carrier 467.775 MHz, 25 kHz Channel Spacing

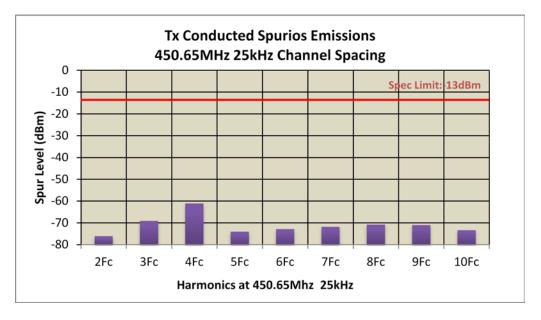


Figure 6F-5: 1W Harmonic of Carrier 450.65 MHz, 25 kHz Channel Spacing

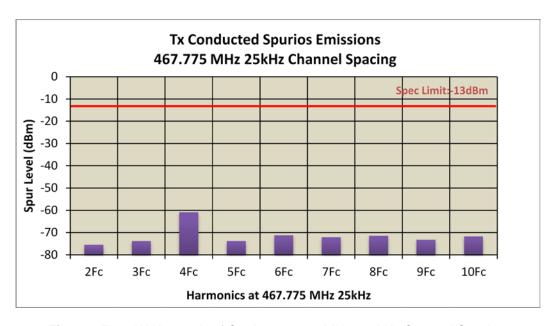


Figure 6F-6: 1W Harmonic of Carrier 467.775 MHz, 25 kHz Channel Spacing

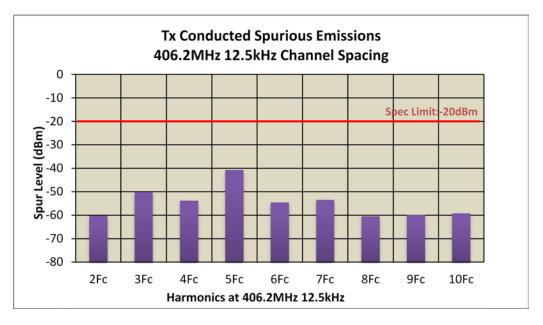


Figure 6F-7: 30 W Harmonic of Carrier 406.2 MHz, Digital 12.5 kHz Channel Spacing

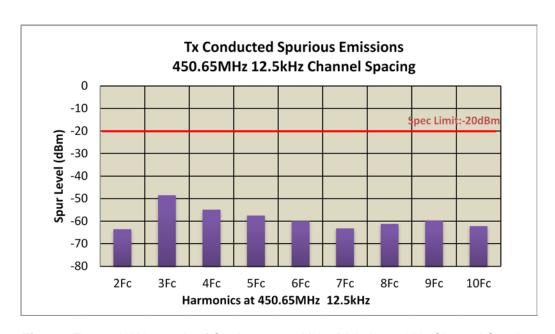


Figure 6F-8: 30 W Harmonic of Carrier 450.65 MHz, Digital 12.5 kHz Channel Spacing

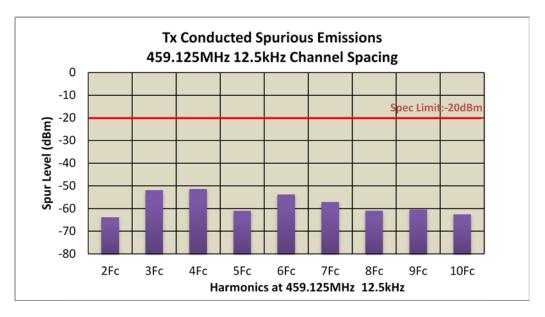


Figure 6F-9: 30 W Harmonic of Carrier 459.125 MHz, Digital 12.5 kHz Channel Spacing

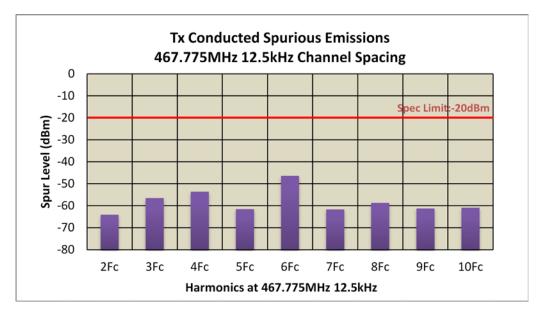


Figure 6F-10: 30 W Harmonic of Carrier 467.775 MHz, Digital 12.5 kHz Channel Spacing

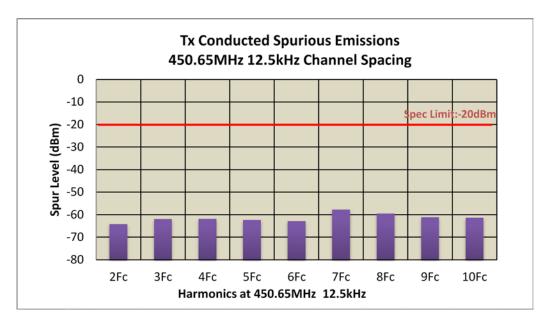


Figure 6F-11: 1W Harmonic of Carrier 450.65 MHz, Digital 12.5 kHz Channel Spacing

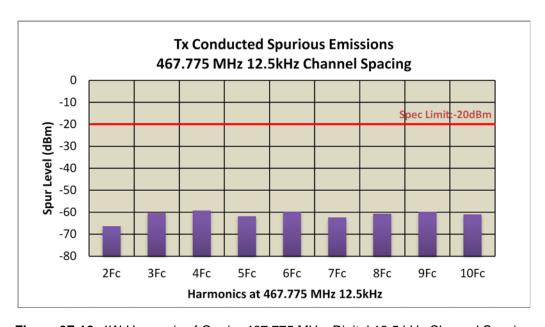


Figure 6F-12: 1W Harmonic of Carrier 467.775 MHz, Digital 12.5 kHz Channel Spacing

Remarks:

## **EXHIBIT 6G Transmitter Radiated Spurious Emissions**

FCC ID: AZ492FT7080 IC ID: 109U-92FT7080 Motorola Solutions. TRANSMITTER RADIATED SPURIOUS EMISSIONS: BALI REFRESH MOBILE 403-470MHZ 1-25W MODEL #: XPR 5550e TX DIGITAL Audio Accy (PPT) - RMN5127C 02806-EMC-00002 406.2 MHz 12.5 kHz 30 Watt(s)/Max Power S/N: 511TRMB909 **FCC Failing** Horizontal Measured Emission Vertical Measured Emission Equiv (MHz) Limit Equiv Pwr Into Ideal Dipole (dBm) Pwr Into Ideal Dipole (dBm) -20 \*\* 812.4000 1218.6000 -20 1624 8000 -20 \*\* 2031.0000 -20 2437.2000 -20 2843.4000 -20 3249.6000 -20 \*\* 3655.8000 -20 4062.0000 -20 RADIATED SPURIOUS EMISSIONS Emission Level (dBm -20 ■Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dB -40 3249.6000 3655.8000 2031.0000 FCC Failing Limit Frequency (MHz) The data presented here was taken using the substitution method as found in the TIA/EIA-603 document. Motorola Penang EMC Lab - Test Performed by: Qawiman/Nazrin August 28, 2015 FCC Registration: 772092 Industry Canada: 109AK Remarks:\*\* Indicates the spurious emission could not be detected due to noise limitations or ambients. \*Pursuant to CFR 47 Part 2:1057 ( c ), emissions attenuated more than 20 dB below the permissible limit are not reported Temp(Deg): 23.4 Hum(%RH): 71.2 Passed Results Marginal Results Failed Results

FCC ID: AZ492FT7080 Motorola Solutions. IC ID: 109U-92FT7080 TRANSMITTER RADIATED SPURIOUS EMISSIONS: BALI REFRESH MOBILE 403-470MHZ 1-25W MODEL #: XPR 5550e TX DIGITAL Audio Accy (PPT) - RMN5127C 02806-EMC-00002 450.65 MHz 12.5 kHz 30 Watt(s)/Max Power S/N: 511TRMB909 Vertical Measured Emission FCC Failing Horizontal Measured Emission Frequency (MHz) Equiv Pwr Into Ideal Dipole (dBm) Limit Equiv Pwr Into Ideal Dipole (dBm) 901.3000 -20 1351.9500 -20 1802.6000 -20 2253.2500 -20 2703.9000 -20 3154.5500 -20 \*\* \*\* 3605,2000 -20 4055.8500 -20 4506.5000 -20 ×× xx RADIATED SPURIOUS EMISSIONS Emission Level (dBm) -20 Vertical Measured
 Emission Equiv Pwr Into Ideal Dipole (dBm) -40

The data presented here was taken using the substitution method as found in the TIA/EIA-603 document.

Motorola Penang EMC Lab - Test Performed by: Qawiman/Nazrin

FCC Registration: 772092

Industry Canada: 109AK

Remarks:\*\* Indicates the spurious emission could not be detected due to noise limitations or ambients.

\*Pursuant to CFR 47 Part 2.1057 ( c ), emissions attenuated more than 20 dB below the permissible limit are not reported

Temp(Deg): 23.4 Hum(%RH): 71.2

Marginal Results

Passed Results

Remarks:

Failed Results

02806-EMC-00002

FCC ID: AZ492FT7080 Motorola Solutions. IC ID: 109U-92FT7080

TRANSMITTER RADIATED SPURIOUS EMISSIONS: BALI REFRESH MOBILE 403-470MHZ 1-25W MODEL #: XPR 5550e TX DIGITAL Audio Accy (PPT) - RMN5127C

	5 MHz	_	12.5 kH	Z	30 W	/att(s)/Ma	x Power		S/N:	: 511TRMB909		
Frequ (MF	equency FCC Failing (MHz) Limit					tal Measur r Into Ideal			Vertical Measured Emissi Equiv Pwr Into Ideal Dipole (			
918.2	500		-20			**				**		
1377.	3750		-20			**						
1836.	5000		-20			**				**		
2295.	3250		-20			**				**		
2754.	7500		-20			**						
3213.	8750		-20			**				**		
3673.	0000		-20			***				**		
4132.	1250		-20			**				**		
4591.	2500		-20							**		
		_										
		-										
₽ 0 7				RADIA	ATED SPUR	IOUS EMIS	SIONS			■Horizontal Measured		
,										Emission Equiv Pwr In Ideal Dipole (dBm)		
-20 -	-	-	-	-	-	-	-	-	-	DiVertical Measured Emission Equiv Pwr In Ideal Dipole (dBm)		
-40	8	8	8	8	8		8	8	8	4		
<del>-</del>	918.2500	1377.3750	1836.5000	2295.6250	2754.7500	3213.8750	3673.0000	41321250	4591.2500	-FCC Faling Limit		
	2	137	38	229		듗 ncy (MHz)	367	413	459			
					. requei	j (minz)						
		4-l	n using th	a cuhetit	ution metho	d as found	in the TIA	IEIN ena 4	ooument			
e data pres	entea neri	e was take				u as iound	in the tim	IEIM-BUS U				

Remarks:\*\* Indicates the spurious emission could not be detected due to noise limitations or ambients. \*Pursuant to CFR 47 Part 2.1057 ( c ), emissions attenuated more than 20 dB below the permissible limit are not reported

Temp(Deg): 23.4 Hum(%RH): 71.2 Failed Results Marginal Results Remarks: Passed Results

\*\*

\*\*

3274.4250

3742.2000

4209.9750

4677.7500

FCC ID: AZ492FT7080 Motorola Solutions. IC ID: 109U-92FT7080 TRANSMITTER RADIATED SPURIOUS EMISSIONS: BALI REFRESH MOBILE 403-470MHZ 1-25W MODEL #: XPR 5550e TX DIGITAL Audio Accy (PPT) - RMN5127C 02806-EMC-00002 467.775 MHz 12.5 kHz 30 Watt(s)/Max Power S/N: 511TRMB909 Vertical Measured Emission FCC Failing Horizontal Measured Emission Frequency (MHz) Equiv Pwr Into Ideal Dipole (dBm) Equiv Pwr Into Ideal Dipole (dBm) Limit 935.5500 -20 1403.3250 -20 1871.1000 -20 2338.8750 -20 2806.6500 -20

\*\*

××

-20

-20

-20

-20

Figure 6G-4 - 30 Watts, 467.775 MHz, 12.5 kHz Channel Spacing

\*Pursuant to CFR 47 Part 2.1057 ( c ), emissions attenuated more than 20 dB below the permissible limit are not reported

Industry Canada: 109AK

Marginal Results

The data presented here was taken using the substitution method as found in the TIA/EIA-603 document.

Remarks:\*\* Indicates the spurious emission could not be detected due to noise limitations or ambients.

Motorola Penang EMC Lab - Test Performed by: Qawiman/Nazrin

Passed Results

FCC Registration: 772092

Remarks:

August 28, 2015

Temp(Deg): 23.4 Hum(%RH): 71.2

Failed Results

FCC ID: AZ492FT7080 Motorola Solutions. IC ID: 109U-92FT7080 TRANSMITTER RADIATED SPURIOUS EMISSIONS: BALI REFRESH MOBILE 403-470MHZ 1-25W TX DIGITAL MODEL #: XPR 5550e Audio Accy (PPT) - RMN5127C 02806-EMC-00002

_	450	).65 MHz		12.5 kHz	Z	1 W	att(s)/Low	Power		S/N: 5	11TRMB909
	Fr	equency (MHz)		FCC Failin Limit	ng	Horizon Equiv Pw	tal Measure r Into Ideal	ed Emissior Dipole (dBr	n) Equ	Vertical Me uiv Pwr Int	easured Emission o Ideal Dipole (dBm)
	9	01.3000	$\neg$	-20			**				**
	13	51.9500		-20			**				**
	18	02.6000		-20			**				
	22	253.2500		-20			**				**
	27	03.9000		-20			**				
	31	54.5500		-20			**				
	36	05.2000		-20			**				**
	40	55.8500		-20			**				
	45	06.5000		-20			**				
╌											
	Emission Level (dBm)	0			RADIA	ATED SPUR	IOUS EMIS	SIONS			■Hortzontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
	9										
	9.0	20	_	_	_	_	_	-	_	-	©Vertical Measured
	-										Emission Equiv Pwr Into
	.Q	40									Ideal Dipole (dBm)
	il.		8	8	8	8	8	8	8	8	
	ш	901.3000	1351.9500	1802.6000	2253.2500	2703.9000	3154.5500	3605.2000	4055.8500	4506.5000	FCC Faling Limit
		8	8	8	525	270	318	8	406	8	
						Frequer	ncy (MHz)				

The data presented here was taken using the substitution method as found in the TIA/EIA-603 document. Motorola Penang EMC Lab - Test Performed by: Qawiman/Nazrin August 28, 2015

FCC Registration: 772092 Industry Canada: 109AK

Remarks:\*\* Indicates the spurious emission could not be detected due to noise limitations or ambients.

\*Pursuant to CFR 47 Part 2.1057 ( c ), emissions attenuated more than 20 dB below the permissible limit are not reported

Temp(Deg): 23.4 Hum(%RH): 71.2 Marginal Results Failed Results Remarks: Passed Results

Audio Accy (PPT) - RMN5127C

FCC ID: AZ492FT7080 Motorola Solutions. IC ID: 109U-92FT7080

TRANSMITTER RADIATED SPURIOUS EMISSIONS: BALI REFRESH MOBILE 403-470MHZ 1-25W MODEL #: XPR 5550e TX DIGITAL

02806-EMC-00002

467.775 MHz S/N: 511TRMB909 12.5 kHz 1 Watt(s)/Low Power FCC Failing Frequency (MHz) Horizontal Measured Emission Vertical Measured Emission Limit Equiv Pwr Into Ideal Dipole (dBm) Equiv Pwr Into Ideal Dipole (dBm) 935.5500 ×× 1403.3250 -20 1871,1000 -20 \*\* \*\* 2338.8750 -20 2806.6500 -20 3274.4250 \*\* \*\* -20 3742.2000 -20 4209.9750 -20 4677.7500 -20 RADIATED SPURIOUS EMISSIONS Emission Level (dBm) -20 ■ Vertical Measured Emission Equiv Pwr -40 Into Ideal Dipole (dBm) 935,5500 1871.1000 2806.6500 3274,4250 37422000 4209.9750 Frequency (MHz) The data presented here was taken using the substitution method as found in the TIA/EIA-603 document. August 28, 2015

Motorola Penang EMC Lab - Test Performed by: Qawiman/Nazrin FCC Registration: 772092 Industry Canada: 109AK

Remarks:\*\* Indicates the spurious emission could not be detected due to noise limitations or ambients.

\*Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported

Temp(Deg): 23.4 Hum(%RH): 71.2 Failed Results Marginal Results Remarks: Passed Results

TRANSMITTER RADIATED SPURIOUS EMISSIONS: BALI REFRESH MOBILE 403-470MHZ 1-25W MODEL #: XPR 5550e TX ANALOG Audio Accy (PPT) - RMN5127C

02806-EMC-00002 406.2 MHz 25 kHz 30 Watt(s)/Max Power S/N: 511TRMB909 FCC Failing Vertical Measured Emission Equiv Frequency (MHz) Horizontal Measured Emission Pwr Into Ideal Dipole (dBm) Limit Equiv Pwr Into Ideal Dipole (dBm) 812.4000 \*\* 1218.6000 1624.8000 -13 \*\* \*\* 2031.0000 -13 2437.2000 -13 2843.4000 -13 \*\* \*\* 3249.6000 -13 3655.8000 -13 \*\* 4062.0000 ×× -13 RADIATED SPURIOUS EMISSIONS Emission Level (dBm) -20 ■Vertical Measured Emission Equiv Per Into Ideal Dipole (dBm) -40 8 8000 812,4000 800 800 8 8 8000 4062,0000 2437 3249 3655 FCC Failing Limit 8 Frequency (MHz) The data presented here was taken using the substitution method as found in the TIA/EIA-603 document. August 28, 2015 Motorola Penang EMC Lab - Test Performed by: Qawiman/Nazrin FCC Registration: 772092 Industry Canada: 109AK

Remarks:\*\* Indicates the spurious emission could not be detected due to noise limitations or ambients.

\*Pursuant to CFR 47 Part 2.1057 ( c ), emissions attenuated more than 20 dB below the permissible limit are not reported

Temp(Deg): 23.4 Hum(%RH): 71.2 Marginal Results Failed Results Remarks: Passed Results

TRANSMITTER RADIATED SPURIOUS EMISSIONS: BALI REFRESH MOBILE 403-470MHZ 1-25W MODEL #: XPR 5550e TX ANALOG Audio Accy (PPT) - RMN5127C 02806-EMC-00002

450.65	MHz		25 kHz		30 W	Vatt(s)/Ma:	x Power		S/N:	511TRMB909
Freque (MH			FCC Failin Limit	ng		tal Measure r Into Ideal				Measured Emission nto Ideal Dipole (dBn
901.3	000	$\top$	-13			**				**
1351.9	9500		-13			**				**
1802.6	3000		-13			**				**
2253.2	2500		-13			**				**
2703.9	9000		-13			**				**
3154.5	5500		-13			**				**
3605.2	2000		-13			**				**
4055.8	3500		-13			**				**
4506.5	000		-13			"				"
		_								
		#								
		+						_		
		+-						_		
		+-			-			_		
		+-						_		
		+-						-		
		+-								
		+-								
		+-								
		+-								
		$\bot$								
		_								
- 0-				RADIA	ATED SPURI	IOUS EMIS	SIONS	•		■Horizontal Measured
	_	_	_	_	_	_	_	-	_	Emission Equiv Pwr Into Ideal Dipole (dBm)
-20 -										□Vertical Measured Emission Equiv Pwr Into
-40 -			•					•		Ideal Dipole (dBm)
	901.3000	8	8	8	8	88	8	88	8	■FCC Falling
•	8	1351.9500	1802.6000	2253.2500	2703.9000	호 ncy (MHz)	3605.2000	4055,8500	4506.5000	Limit
					rrequen	ioy (miriz)				

Industry Canada: 109AK

FCC Registration: 772092

Remarks:\*\* Indicates the spurious emission could not be detected due to noise limitations or ambients.

\*Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported

Temp(Deg): 23.4 Hum(%RH): 71.2 Remarks: Passed Results Marginal Results Failed Results

TRANSMITTER RADIATED SPURIOUS EMISSIONS: BALI REFRESH MOBILE 403-470MHZ 1-25W MODEL #: XPR 5550e TX ANALOG Audio Accy (PPT) - RMN5127C 02806-EMC-00002

459.125 MHz		25 kHz			30 Watt(s)/Max Power				S/N: 511TRMB909		
Frequency (MHz)		FCC Failing Limit		Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)				Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)			
918.2500		-13			**				11		
1377.3750		-13			***				**		
1836.5000		-13			***				**		
2295.6250		-13			×						
2754.7500		-13			***				**		
3213.8750		-13			**				**		
3673.0000		-13			***				**		
4132.1250		-13			***				**		
4591.2500		-13			**						
0 <del></del>			RADIA	ATED SPUR	IOUS EMIS	SIONS			■Horizontal Measured Emission Equiv Per Into		
_	-	-	-	-	-	-	-	-	Ideal Dipole (dBm)		
-20 -									■Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)		
40 +	377.3750	836, 5000	2295, 6250	2754.7500	3213.8750	9673.0000	4132 1250	4591.2500	FCC Failing		
8	1377	1836	2295		뛽 ncy (MHz)	3673	4132	4591			
data presented here			1.00								
		n using the	e substit	uuon metho	ici as found	iin the IIAVE	1 <b>A-6U3</b> 0	ocument			

Remarks:\*\* Indicates the spurious emission could not be detected due to noise limitations or ambients.

\*Pursuant to CFR 47 Part 2.1057 ( c ), emissions attenuated more than 20 dB below the permissible limit are not reported

Temp(Deg): 23.4 Hum(%RH): 71.2 Failed Results Marginal Results Remarks: Passed Results

Figure 6G-9 - 30 Watts, 459.125 MHz, 25 kHz Channel Spacing

FCC ID: AZ492FT7080 Motorola Solutions. IC ID: 109U-92FT7080 TRANSMITTER RADIATED SPURIOUS EMISSIONS: BALI REFRESH MOBILE 403-470MHZ 1-25W TX ANALOG MODEL #: XPR 5550e Audio Accy (PPT) - RMN5127C 02806-EMC-00002 467.775 MHz 25 kHz 30 Watt(s)/Max Power S/N: 511TRMB909 FCC Failing Horizontal Measured Emission Vertical Measured Emission Frequency (MHz) Equiv Pwr Into Ideal Dipole (dBm) Equiv Pwr Into Ideal Dipole (dBm) Limit 935.5500 -13 1403.3250 XX \*\* -13 1871.1000 -13 2338.8750 -13 ×× 2806 6500 -133274.4250 -13 3742.2000 -13 4209.9750 -13 XX \*\* 4677.7500 -13 RADIATED SPURIOUS EMISSIONS Emission Level (dBm) Emission Equiv Pwr Into Ideal Dipole (dBm) -20 -40 5500 1250 200 FCC Failing Limit 2806 Frequency (MHz) The data presented here was taken using the substitution method as found in the TIA/EIA-603 document. Motorola Penang EMC Lab - Test Performed by: Qawiman/Nazrin August 28, 2015 FCC Registration: 772092 Industry Canada: 109AK Remarks:\*\* Indicates the spurious emission could not be detected due to noise limitations or ambients. \*Pursuant to CFR 47 Part 2.1057 ( c ), emissions attenuated more than 20 dB below the permissible limit are not reported

Remarks: Passed Results Marginal Results Failed Results

Figure 6G-10 - 30 Watts, 467.775 MHz, 25 kHz Channel Spacing

FCC ID: AZ492FT7080

Motorola Solutions. IC ID: 109U-92FT7080 TRANSMITTER RADIATED SPURIOUS EMISSIONS: BALI REFRESH MOBILE 403-470MHZ 1-25W MODEL #: XPR 5550e TX ANALOG Audio Accy (PPT) - RMN5127C 02806-EMC-00002 450.65 MHz 25 kHz 1 Watt(s)/Low Power S/N: 511TRMB909 Frequency (MHz) FCC Failing Vertical Measured Emission Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm) Equiv Pwr Into Ideal Dipole (dBm) -13 901.3000 1351.9500 -13 1802.6000 -13 ×× 2253.2500 -13 2703.9000 -13 XX TX 3154.5500 -13 \*\* TX 3605.2000 -13 77 4055.8500 -13 4506.5000 -13 RADIATED SPURIOUS EMISSIONS Emission Level (dBm) Emission Equiv Pwr Into Ideal Dipole (dBm) -20 Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm) 8 288 8 1802,6000 -FCC Failing 2253. 3154 6055 줎 2703 Frequency (MHz) The data presented here was taken using the substitution method as found in the TIA/EIA-603 document. Motorola Penang EMC Lab - Test Performed by: Qawiman/Nazrin August 28, 2015 FCC Registration: 772092 Industry Canada: 109AK Remarks:\*\* Indicates the spurious emission could not be detected due to noise limitations or ambients. \*Pursuant to CFR 47 Part 2.1057 ( c ), emissions attenuated more than 20 dB below the permissible limit are not reported Temp(Deg): 23.4 Hum(%RH): 71.2 Remarks: Passed Results Marginal Results Failed Results

Figure 6G-11 - 1 Watts, 450.65 MHz, 25 kHz Channel Spacing

TRANSMITTER RADIATED SPURIOUS EMISSIONS: BALI REFRESH MOBILE 403-470MHZ 1-25W TX ANALOG MODEL #: XPR 5550e Audio Accy (PPT) - RMN5127C 02806-EMC-00002

46	467.775 MHz 25 kHz			1 Watt(s)/Low Power				S/N: 511TRMB909				
	Freque (MH	ency z)	FCC Failing Limit			Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)				Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)		
	935.5	500		-13			***				11	
	1403.3			-13			**				**	
	1871.1	000		-13			***				11	
	2338.8	3750		-13			**					
	2806.6	500		-13			**				**	
	3274.4	250		-13			***				**	
	3742.2			-13			***				**	
	4209.9	750		-13			***				**	
	4677.7	500		-13			***				**	
$\overline{}$			_						_			
	0 -				KADIA	NED SPURI	OUS EMISS	IONS				
Emission Level (dBm)	" T										Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	
B		_	_	_	_	_	_	_	_	_	Into Ideal Dipole (dBm)	
9	-20 -											
3											□Vertical Measured	
8											Emission Equiv Pwr Into Ideal Dipole (dBm)	
60	-40 +	8	8	8	8	8	8	8	8		1	
E		935.5500	8	ě	8	8	4	8	6	78	■FCC Failing	
_		935	403, 3250	1871.1000	2338. 8750	2806. 6500	3274. 4250	3742.2000	4209.9750	677.7500	FCC Falling Limit	
			-	-	64		ncy (MHz)	es	4	4		
						eque	j (inz)					

The data presented here was taken using the substitution method as found in the TIA/EIA-603 document. Motorola Penang EMC Lab - Test Performed by: Qawiman/Nazrin Industry Canada: 109AK FCC Registration: 772092

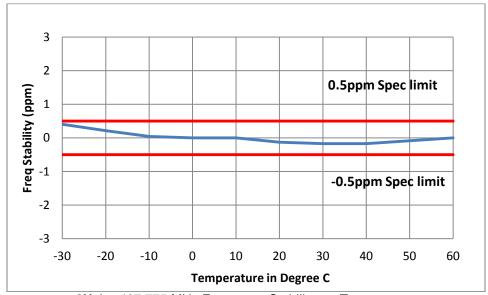
August 28, 2015

Remarks:\*\* Indicates the spurious emission could not be detected due to noise limitations or ambients.

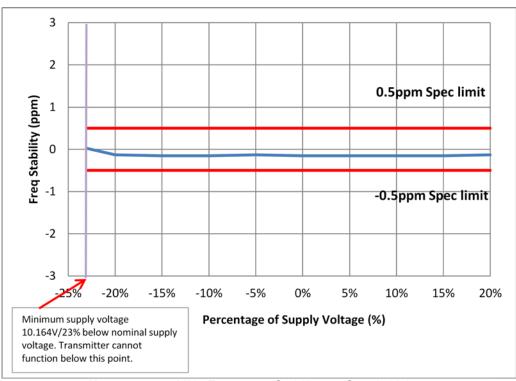
\*Pursuant to CFR 47 Part 2.1057 ( c ), emissions attenuated more than 20 dB below the permissible limit are not reported

Temp(Deg): 23.4 Hum(%RH): 71.2 Remarks: Passed Results Marginal Result Failed Results

# **EXHIBIT 6H – Frequency Stability**

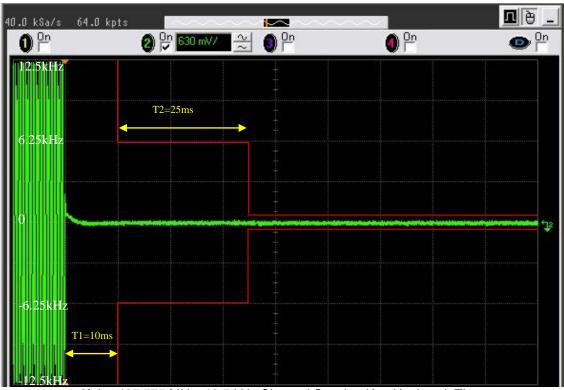


6H-1 - 467.775 MHz Frequency Stability vs. Temperature

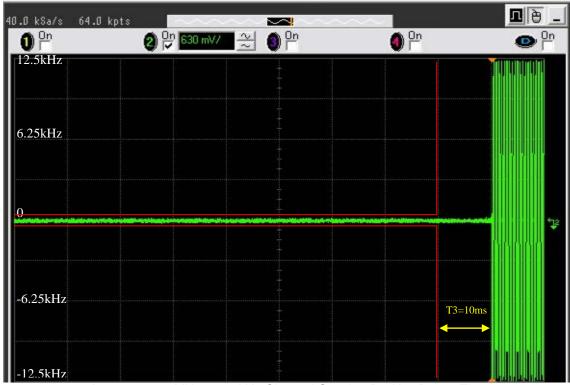


6H-2 - 467.775 MHz Frequency Stability vs. Supply Voltage

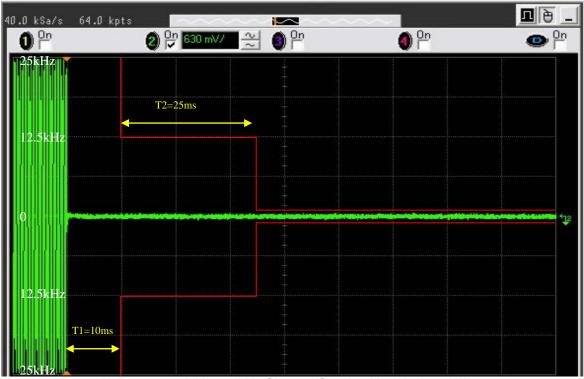
# **EXHIBIT 6I – Transient Frequency Behavior**



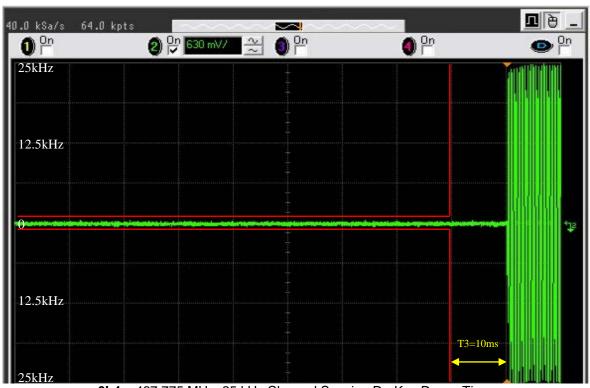
6I-1 - 467.775 MHz, 12.5 kHz Channel Spacing Key-Up Attack Time



6I-2 - 467.775 MHz, 12.5 kHz Channel Spacing De-Key Decay Time



61-3 - 467.775 MHz, 25 kHz Channel Spacing Key-Up Attack Time



61-4 - 467.775 MHz, 25 kHz Channel Spacing De-Key Decay Time