Applicant: Motorola Solutions Inc. FCC ID: AZ492FT7089 IC: 109U-92FT7089

EXHIBIT #6

Test Report

FCC: Pursuant 2.1033 (c), 90, 80, 74, 22 IC: RSS-Gen, RSS-119, and RSS-182

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Exhibit 6A: RF Output Power (conducted)

The RF output power was measured with the indicated voltage and current applied into the RF amplifying device.

APX8500 V/U/7-800 MHz

TX Output Power and TX DC Current

(Nominal DC Voltage 13.6V, Primary Supply Voltage 13.6V, Temp 25°C)

| Frequency MHz Output Power (W) Current (A) Output Power (W) Current (W) Current (W) Current (A) 138.0125 1 1.788 60 9.413 158.55 1 1.788 60 9.7 161.7 1 1.8 60 9.7 161.7 1 1.8 60 9.1 380.0125 1 1.688 60 9.1 380.0125 1 1.875 54 10.613 406.2 1 1.713 54 9.038 450.65 1 1.75 54 9.338 467.775 1 1.713 54 9.338 469.9875 1 1.65 54 9.275 482.0125 1 1.713 54 9.55 511.9875 1 1.813 48 9.9 519.9875 1 1.99 30 7.85 764.0125 1 1.963 36 8.263 7 | (Nominal DC Voltage 13.6V, Primary Supply Voltage 13.6V, Temp 25°C) | | | | | |
|---|---|--------------------|-------|--------------------|--------|--|
| MHz (W) (A) (W) (A) 138.0125 1 1.788 60 9.413 158.55 1 1.788 60 9.7 161.7 1 1.8 60 10.1 173.3875 1 1.688 60 9.1 380.0125 1 1.875 54 10.613 406.2 1 1.713 54 9.038 450.65 1 1.75 54 9.475 459.125 1 1.725 54 9.338 467.775 1 1.713 54 9.338 469.9875 1 1.65 54 9.275 482.0125 1 1.713 54 9.338 469.9875 1 1.65 54 9.275 482.0125 1 1.713 54 9.55 511.9875 1 1.813 48 9.9 519.9875 1 1.963 36 8.263 | | Low Power Readings | | Max Power Readings | | |
| 158.55 1 1.788 60 9.7 161.7 1 1.8 60 10.1 173.3875 1 1.688 60 9.1 380.0125 1 1.875 54 10.613 406.2 1 1.713 54 9.038 450.65 1 1.75 54 9.475 459.125 1 1.725 54 9.338 467.775 1 1.713 54 9.338 469.9875 1 1.65 54 9.275 482.0125 1 1.713 54 9.55 511.9875 1 1.813 48 9.9 519.9875 1 1.813 48 9.9 519.9875 1 1.963 36 8.263 764.0125 1 1.963 36 8.175 769.0125 1 1.95 36 8.175 774.8875 1 1.938 36 8.113 | | | | | | |
| 161.7 1 1.8 60 10.1 173.3875 1 1.688 60 9.1 380.0125 1 1.875 54 10.613 406.2 1 1.713 54 9.038 450.65 1 1.75 54 9.475 459.125 1 1.725 54 9.338 467.775 1 1.713 54 9.338 469.9875 1 1.65 54 9.275 482.0125 1 1.713 54 9.55 511.9875 1 1.813 48 9.9 519.9875 1 1.813 48 9.9 519.9875 1 1.963 36 8.263 764.0125 1 1.963 36 8.263 768.0125 1 1.95 36 8.175 769.0125 1 1.95 36 8.175 774.8875 1 1.938 36 8.113 <td>138.0125</td> <td>1</td> <td>1.788</td> <td>60</td> <td>9.413</td> | 138.0125 | 1 | 1.788 | 60 | 9.413 | |
| 173.3875 1 1.688 60 9.1 380.0125 1 1.875 54 10.613 406.2 1 1.713 54 9.038 450.65 1 1.75 54 9.475 459.125 1 1.725 54 9.338 467.775 1 1.713 54 9.338 469.9875 1 1.65 54 9.275 482.0125 1 1.713 54 9.55 511.9875 1 1.813 48 9.9 519.9875 1 1.99 30 7.85 764.0125 1 1.963 36 8.263 768.0125 1 1.95 36 8.175 769.0125 1 1.95 36 8.175 774.8875 1 1.93 36 8.113 775.9875 1 1.838 36 8 799.0875 1 1.938 36 8.35 <td>158.55</td> <td>1</td> <td>1.788</td> <td>60</td> <td>9.7</td> | 158.55 | 1 | 1.788 | 60 | 9.7 | |
| 380.0125 1 1.875 54 10.613 406.2 1 1.713 54 9.038 450.65 1 1.75 54 9.475 459.125 1 1.725 54 9.338 467.775 1 1.713 54 9.338 469.9875 1 1.65 54 9.275 482.0125 1 1.713 54 9.55 511.9875 1 1.813 48 9.9 519.9875 1 1.99 30 7.85 764.0125 1 1.963 36 8.263 768.0125 1 1.95 36 8.175 769.0125 1 1.95 36 8.175 774.8875 1 1.93 36 8.113 775.9875 1 1.938 36 8.35 799.0875 1 1.938 36 8.35 799.0875 1 1.938 36 8.3 | 161.7 | 1 | 1.8 | 60 | 10.1 | |
| 406.2 1 1.713 54 9.038 450.65 1 1.75 54 9.475 459.125 1 1.725 54 9.338 467.775 1 1.713 54 9.338 469.9875 1 1.65 54 9.275 482.0125 1 1.713 54 9.55 511.9875 1 1.813 48 9.9 519.9875 1 1.9 30 7.85 764.0125 1 1.963 36 8.263 768.0125 1 1.95 36 8.175 769.0125 1 1.95 36 8.175 769.0875 1 1.95 36 8.113 775.9875 1 1.938 36 8.113 775.9875 1 1.938 36 8.35 799.0875 1 1.938 36 8.35 799.0875 1 1.938 36 8.35 804.9125 1 1.95 36 8.638 < | 173.3875 | 1 | 1.688 | 60 | 9.1 | |
| 450.65 1 1.75 54 9.475 459.125 1 1.725 54 9.338 467.775 1 1.713 54 9.338 469.9875 1 1.65 54 9.275 482.0125 1 1.713 54 9.55 511.9875 1 1.813 48 9.9 519.9875 1 1.9 30 7.85 764.0125 1 1.963 36 8.263 768.0125 1 1.95 36 8.175 769.0875 1 1.95 36 8.175 774.8875 1 1.938 36 8.113 775.9875 1 1.938 36 8.35 799.0875 1 1.925 36 8.35 799.0875 1 1.938 36 8.35 804.9125 1 1.95 36 8.638 805.9875 1 1.838 36 8.5 | 380.0125 | 1 | 1.875 | 54 | 10.613 | |
| 459.125 1 1.725 54 9.338 467.775 1 1.713 54 9.338 469.9875 1 1.65 54 9.275 482.0125 1 1.713 54 9.55 511.9875 1 1.813 48 9.9 519.9875 1 1.963 36 8.263 764.0125 1 1.963 36 8.263 768.0125 1 1.95 36 8.175 769.0125 1 1.95 2 2.313 769.0875 1 1.95 36 8.175 774.8875 1 1.938 36 8.113 775.9875 1 1.838 36 8 799.0875 1 1.925 36 8.35 804.9125 1 1.95 36 8.638 805.9875 1 1.838 36 8.525 806.0125 1 1.95 42 9. | 406.2 | 1 | 1.713 | 54 | 9.038 | |
| 467.775 1 1.713 54 9.338 469.9875 1 1.65 54 9.275 482.0125 1 1.713 54 9.55 511.9875 1 1.813 48 9.9 519.9875 1 1.9 30 7.85 764.0125 1 1.963 36 8.263 768.0125 1 1.95 36 8.175 769.0125 1 1.95 2 2.313 769.0875 1 1.95 36 8.175 774.8875 1 1.938 36 8.113 775.9875 1 1.838 36 8 799.0875 1 1.938 36 8.35 804.9125 1 1.95 36 8.638 805.9875 1 1.838 36 8.525 806.0125 1 1.95 42 9.675 814.9875 1 1.975 42 10.0 | 450.65 | 1 | 1.75 | | 9.475 | |
| 469.9875 1 1.65 54 9.275 482.0125 1 1.713 54 9.55 511.9875 1 1.813 48 9.9 519.9875 1 1.9 30 7.85 764.0125 1 1.963 36 8.263 768.0125 1 1.95 36 8.175 769.0125 1 1.95 2 2.313 769.0875 1 1.95 36 8.175 774.8875 1 1.938 36 8.113 775.9875 1 1.838 36 8 799.0875 1 1.925 36 8.35 799.0875 1 1.938 36 8.35 804.9125 1 1.95 36 8.638 805.9875 1 1.838 36 8.525 806.0125 1 1.975 42 10.063 823.9875 1 1.975 42 10 | 459.125 | 1 | 1.725 | | 9.338 | |
| 482.0125 1 1.713 54 9.55 511.9875 1 1.813 48 9.9 519.9875 1 1.9 30 7.85 764.0125 1 1.963 36 8.263 768.0125 1 1.95 36 8.175 769.0125 1 1.95 2 2.313 769.0875 1 1.95 36 8.175 774.8875 1 1.938 36 8.113 775.9875 1 1.838 36 8 799.0875 1 1.925 36 8.35 799.0875 1 1.938 36 8.35 804.9125 1 1.95 36 8.638 805.9875 1 1.838 36 8.525 806.0125 1 1.95 42 9.675 814.9875 1 1.975 42 10.063 823.9875 1 2.013 42 10 | 467.775 | 1 | 1.713 | | 9.338 | |
| 511.9875 1 1.813 48 9.9 519.9875 1 1.9 30 7.85 764.0125 1 1.963 36 8.263 768.0125 1 1.95 36 8.175 769.0125 1 1.95 2 2.313 769.0875 1 1.95 36 8.175 774.8875 1 1.938 36 8.113 775.9875 1 1.838 36 8 798.0125 1 1.925 36 8.35 799.0875 1 1.938 36 8.35 804.9125 1 1.95 36 8.638 805.9875 1 1.838 36 8.525 806.0125 1 1.95 42 9.675 814.9875 1 1.975 42 10.063 823.9875 1 2.013 42 10.513 851.0125 1 2.138 42 | 469.9875 | 1 | 1.65 | 54 | 9.275 | |
| 519.9875 1 1.9 30 7.85 764.0125 1 1.963 36 8.263 768.0125 1 1.95 36 8.175 769.0125 1 1.95 2 2.313 769.0875 1 1.95 36 8.175 774.8875 1 1.938 36 8.113 775.9875 1 1.838 36 8 798.0125 1 1.925 36 8.35 799.0875 1 1.938 36 8.35 804.9125 1 1.95 36 8.638 805.9875 1 1.838 36 8.525 806.0125 1 1.95 42 9.675 814.9875 1 1.975 42 10.063 823.9875 1 2.013 42 10.513 851.0125 1 2.138 42 10.738 860.0125 1 2.138 42 < | 482.0125 | 1 | 1.713 | 54 | 9.55 | |
| 764.0125 1 1.963 36 8.263 768.0125 1 1.95 36 8.175 769.0125 1 1.95 2 2.313 769.0875 1 1.95 36 8.175 774.8875 1 1.938 36 8.113 775.9875 1 1.838 36 8 798.0125 1 1.925 36 8.35 799.0875 1 1.938 36 8.35 804.9125 1 1.95 36 8.638 805.9875 1 1.838 36 8.525 806.0125 1 1.95 42 9.675 814.9875 1 1.975 42 10.063 823.9875 1 2.013 42 10.513 851.0125 1 2.138 42 10.738 860.0125 1 2.138 42 10.738 868.8875 1 2.125 42 | 511.9875 | 1 | 1.813 | 48 | 9.9 | |
| 768.0125 1 1.95 36 8.175 769.0125 1 1.95 2 2.313 769.0875 1 1.95 36 8.175 774.8875 1 1.938 36 8.113 775.9875 1 1.838 36 8 798.0125 1 1.925 36 8.35 799.0875 1 1.938 36 8.35 804.9125 1 1.95 36 8.638 805.9875 1 1.838 36 8.525 806.0125 1 1.95 42 9.675 814.9875 1 1.975 42 10.063 823.9875 1 2.013 42 10.513 851.0125 1 2.138 42 10.738 860.0125 1 2.138 42 10.738 868.8875 1 2.125 42 10.325 | 519.9875 | 1 | 1.9 | 30 | 7.85 | |
| 769.0125 1 1.95 2 2.313 769.0875 1 1.95 36 8.175 774.8875 1 1.938 36 8.113 775.9875 1 1.838 36 8 798.0125 1 1.925 36 8.35 799.0875 1 1.938 36 8.35 804.9125 1 1.95 36 8.638 805.9875 1 1.838 36 8.525 806.0125 1 1.95 42 9.675 814.9875 1 1.975 42 10.063 823.9875 1 2.013 42 10.513 851.0125 1 2.138 42 10.975 860.0125 1 2.138 42 10.738 868.8875 1 2.125 42 10.325 | 764.0125 | 1 | 1.963 | 36 | 8.263 | |
| 769.0875 1 1.95 36 8.175 774.8875 1 1.938 36 8.113 775.9875 1 1.838 36 8 798.0125 1 1.925 36 8.35 799.0875 1 1.938 36 8.35 804.9125 1 1.95 36 8.638 805.9875 1 1.838 36 8.525 806.0125 1 1.95 42 9.675 814.9875 1 1.975 42 10.063 823.9875 1 2.013 42 10.513 851.0125 1 2.138 42 10.975 860.0125 1 2.138 42 10.738 868.8875 1 2.125 42 10.325 | 768.0125 | 1 | 1.95 | 36 | 8.175 | |
| 774.8875 1 1.938 36 8.113 775.9875 1 1.838 36 8 798.0125 1 1.925 36 8.35 799.0875 1 1.938 36 8.35 804.9125 1 1.95 36 8.638 805.9875 1 1.838 36 8.525 806.0125 1 1.95 42 9.675 814.9875 1 1.975 42 10.063 823.9875 1 2.013 42 10.513 851.0125 1 2.138 42 10.975 860.0125 1 2.138 42 10.738 868.8875 1 2.125 42 10.325 | 769.0125 | 1 | 1.95 | 2 | 2.313 | |
| 775.9875 1 1.838 36 8 798.0125 1 1.925 36 8.35 799.0875 1 1.938 36 8.35 804.9125 1 1.95 36 8.638 805.9875 1 1.838 36 8.525 806.0125 1 1.95 42 9.675 814.9875 1 1.975 42 10.063 823.9875 1 2.013 42 10.513 851.0125 1 2.138 42 10.975 860.0125 1 2.138 42 10.738 868.8875 1 2.125 42 10.325 | 769.0875 | 1 | 1.95 | 36 | 8.175 | |
| 798.0125 1 1.925 36 8.35 799.0875 1 1.938 36 8.35 804.9125 1 1.95 36 8.638 805.9875 1 1.838 36 8.525 806.0125 1 1.95 42 9.675 814.9875 1 1.975 42 10.063 823.9875 1 2.013 42 10.513 851.0125 1 2.138 42 10.975 860.0125 1 2.138 42 10.738 868.8875 1 2.125 42 10.325 | 774.8875 | 1 | 1.938 | 36 | 8.113 | |
| 799.0875 1 1.938 36 8.35 804.9125 1 1.95 36 8.638 805.9875 1 1.838 36 8.525 806.0125 1 1.95 42 9.675 814.9875 1 1.975 42 10.063 823.9875 1 2.013 42 10.513 851.0125 1 2.138 42 10.975 860.0125 1 2.138 42 10.738 868.8875 1 2.125 42 10.325 | 775.9875 | 1 | 1.838 | 36 | 8 | |
| 804.9125 1 1.95 36 8.638 805.9875 1 1.838 36 8.525 806.0125 1 1.95 42 9.675 814.9875 1 1.975 42 10.063 823.9875 1 2.013 42 10.513 851.0125 1 2.138 42 10.975 860.0125 1 2.138 42 10.738 868.8875 1 2.125 42 10.325 | 798.0125 | 1 | 1.925 | 36 | 8.35 | |
| 805.9875 1 1.838 36 8.525 806.0125 1 1.95 42 9.675 814.9875 1 1.975 42 10.063 823.9875 1 2.013 42 10.513 851.0125 1 2.138 42 10.975 860.0125 1 2.138 42 10.738 868.8875 1 2.125 42 10.325 | 799.0875 | 1 | 1.938 | 36 | 8.35 | |
| 806.0125 1 1.95 42 9.675 814.9875 1 1.975 42 10.063 823.9875 1 2.013 42 10.513 851.0125 1 2.138 42 10.975 860.0125 1 2.138 42 10.738 868.8875 1 2.125 42 10.325 | 804.9125 | 1 | 1.95 | 36 | 8.638 | |
| 814.9875 1 1.975 42 10.063 823.9875 1 2.013 42 10.513 851.0125 1 2.138 42 10.975 860.0125 1 2.138 42 10.738 868.8875 1 2.125 42 10.325 | 805.9875 | 1 | 1.838 | 36 | 8.525 | |
| 823.9875 1 2.013 42 10.513 851.0125 1 2.138 42 10.975 860.0125 1 2.138 42 10.738 868.8875 1 2.125 42 10.325 | 806.0125 | 1 | 1.95 | 42 | 9.675 | |
| 851.0125 1 2.138 42 10.975 860.0125 1 2.138 42 10.738 868.8875 1 2.125 42 10.325 | 814.9875 | 1 | 1.975 | 42 | 10.063 | |
| 860.0125 1 2.138 42 10.738 868.8875 1 2.125 42 10.325 | 823.9875 | 1 | 2.013 | 42 | 10.513 | |
| 868.8875 1 2.125 42 10.325 | 851.0125 | 1 | 2.138 | 42 | 10.975 | |
| | 860.0125 | 1 | 2.138 | 42 | 10.738 | |
| | 868.8875 | 1 | 2.125 | 42 | 10.325 | |

Exhibit 6A-1: Conducted RF Output Power

Applicant: Motorola Solutions Inc. FCC ID: AZ492FT7089
IC: 109U-92FT7089

Note 1: The output power for frequencies in the range 156 – 162 MHz is higher than the limits specified under rule part 80.215(c)(1) for the following reasons:

- Data submitted to FCC is used by other regions to certify the product, and they do not have similar limits.
- Also, frequencies in this range overlap with other FCC/ IC rule parts where the power is not limited to 50W.

However, when the product gets shipped to the customers, the power will be limited in software to not exceed any more than what is required to comply with the regulatory limits, taking into consideration the measurement uncertainty.

Note 2: The output power for frequencies in the range 456 - 470 MHz is higher than the limits specified under rule part 80.215(e)(3) for the following reasons:

- Data submitted to FCC is used by other regions to certify the product, and they do not have similar limits.
- Also, frequencies in this range overlap with other FCC/ IC rule parts where the power is not limited to 4W.

However, the product will be certified for 1W in those freq ranges for rule part 80.

Note 3: The output power for frequencies in the 7/800 MHz bands are higher than the limits specified under RSS-119 Issue 12, Section 5.4 as the same data is used by other regions to certify the product, and they do not have similar limits.

However, when the product gets shipped to the customers, the power will be limited in software to not exceed any more than what is required to comply with the regulatory limits, taking into consideration the measurement uncertainty.

Applicant: Motorola Solutions Inc. FCC ID: AZ492FT7089
IC: 109U-92FT7089

Exhibit 6B: Audio Frequency Response

Equipment under test: M37TSS9PW1AN S/N: AM3C524

Measurement Criteria Compliance Testing

Audio Frequency Response

Measurement Lab ATE P25 Compliance Lab

8000 West Sunrise Blvd Fort Lauderdale FL, 33322

Results Summary: EUT meets the test requirements

Test Configurations: Audio Frequency Response @ 12.5 kHz channel spacing

Frequency: 158.55 MHz, 467.775 MHz, 769.0875 MHz, and 823.9875

MHz. Audio Frequency Response @ 25 kHz channel spacing Frequency: 158.55 MHz, 511.9875 MHz, 769.0875 MHz, and

823.9875 MHz.

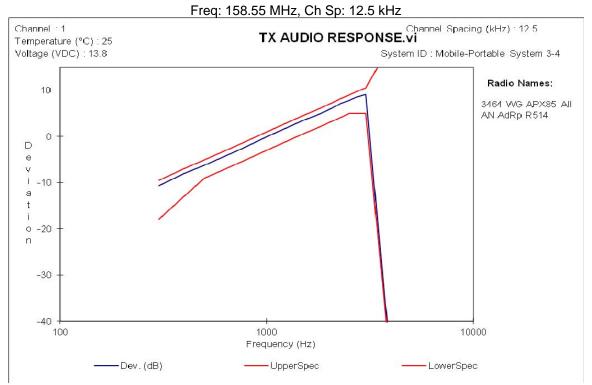


Exhibit 6B- 1: Audio Response - Frequency 158.55 MHz, Ch Sp: 12.5 kHz

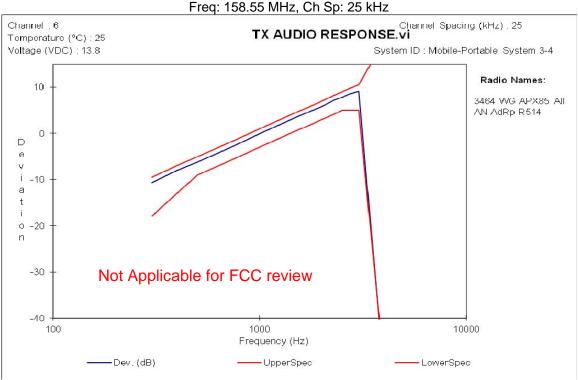


Exhibit 6B- 2: Audio Response - Frequency 158.55 MHz, Ch Sp: 25 kHz

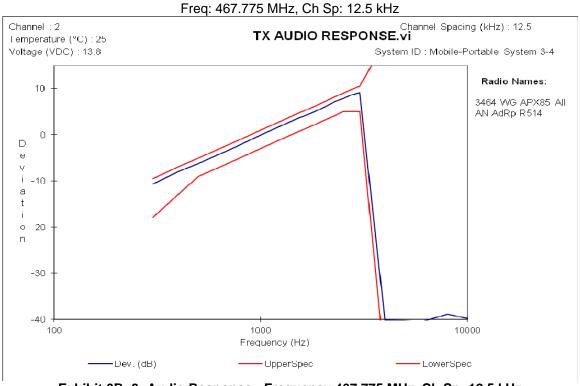
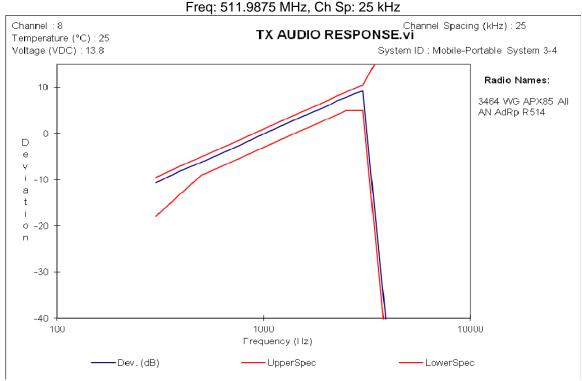


Exhibit 6B- 3: Audio Response - Frequency 467.775 MHz, Ch Sp: 12.5 kHz





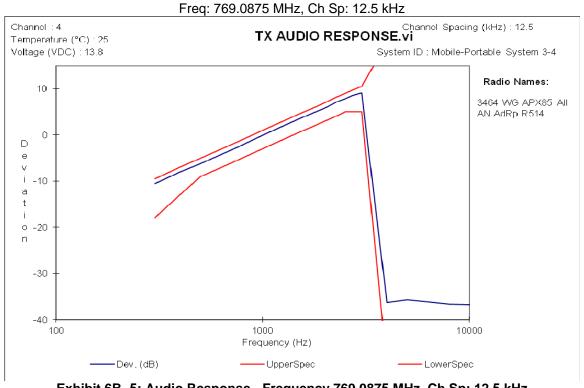


Exhibit 6B- 5: Audio Response - Frequency 769.0875 MHz, Ch Sp: 12.5 kHz

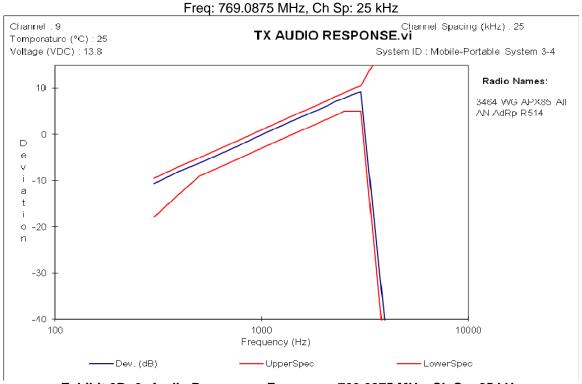


Exhibit 6B- 6: Audio Response - Frequency 769.0875 MHz, Ch Sp: 25 kHz

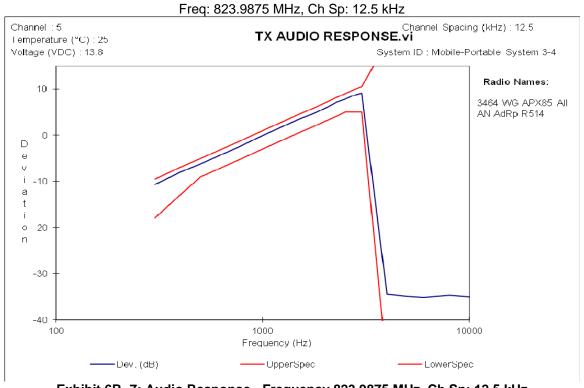


Exhibit 6B-7: Audio Response - Frequency 823.9875 MHz, Ch Sp: 12.5 kHz

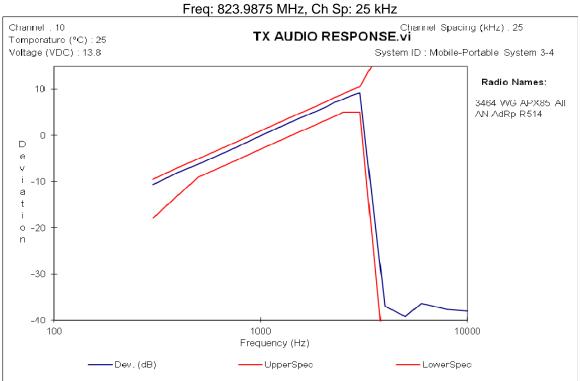


Exhibit 6B- 8: Audio Response - Frequency 823.9875 MHz, Ch Sp: 25 kHz

Applicant: Motorola Solutions Inc. FCC ID: AZ492FT7089
IC: 109U-92FT7089

Exhibit 6C: Low Pass Filter Response

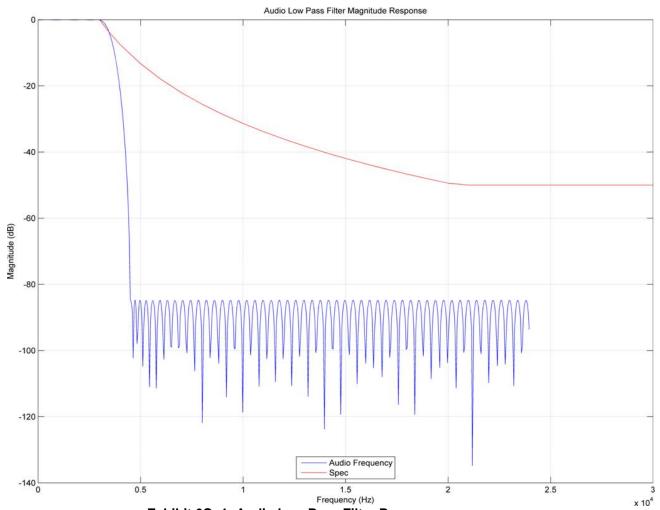


Exhibit 6C- 1: Audio Low Pass Filter Response

Note: Audio Low Pass Filter response doesn't vary with RF frequency, and hence a single plot is given with the limit lines drawn to most stringent spec of all three bands - VHF, UHF and 7/800 MHz.

Exhibit 6D: Modulation Limiting

Percentage Modulation Vs Modulation Frequency & Input Level Frequency = 158.55 MHz, 12.5 kHz Channel

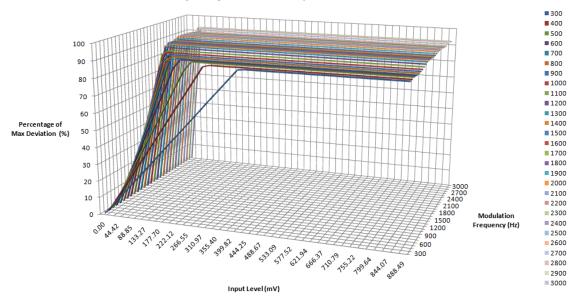


Exhibit 6D- 1: Percentage Mod –vs- Mod Freq and Input Level – Freq 158.55 MHz, Ch Sp: 12.5 kHz

Percentage Modulation Vs Modulation Frequency & Input Level Frequency = 467.775 MHz, 12.5 kHz Channel

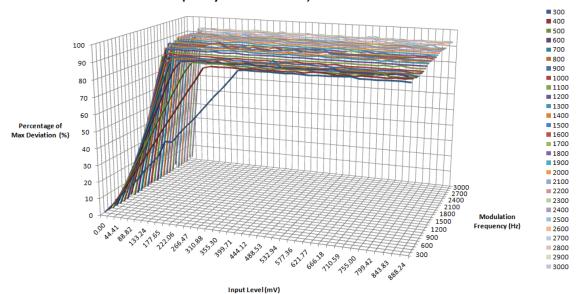


Exhibit 6D- 2 Percentage Mod –vs- Mod Freq and Input Level – Freq 467.775 MHz, Ch Sp: 12.5 kHz

Percentage Modulation Vs Modulation Frequency & Input Level Frequency = 769.0875 MHz, 12.5 kHz Channel

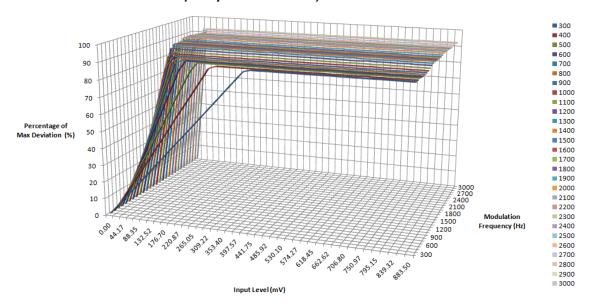


Exhibit 6D- 3: Percentage Mod –vs- Mod Freq and Input Level – Freq 769.0875 MHz, Ch Sp: 12.5 kHz

Percentage Modulation Vs Modulation Frequency & Input Level Frequency = 823.9875 MHz, 12.5 kHz Channel

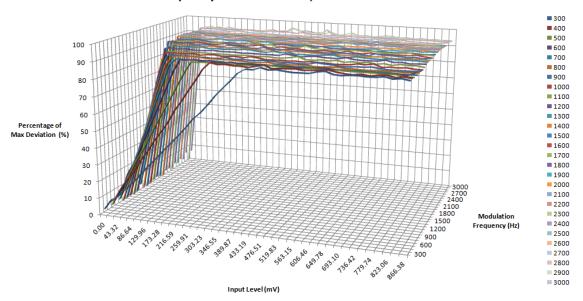


Exhibit 6D- 4: Percentage Mod –vs- Mod Freq and Input Level – Freq 823.9875 MHz, Ch Sp: 12.5 kHz

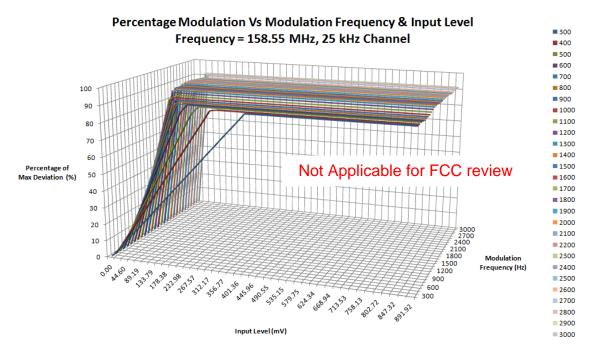


Exhibit 6D- 5: Percentage Mod –vs- Mod Freq and Input Level – Freq 158.55 MHz, Ch Sp: 25 kHz

Percentage Modulation Vs Modulation Frequency & Input Level Frequency = 511.9875 MHz, 25 kHz Channel

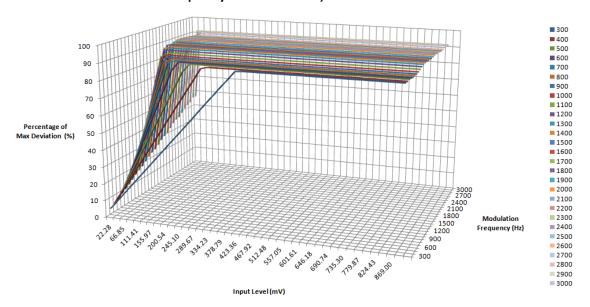


Exhibit 6D- 6: Percentage Mod –vs- Mod Freq and Input Level – Freq 511.9875 MHz, Ch Sp: 25 kHz

Percentage Modulation Vs Modulation Frequency & Input Level Frequency = 769.0875 MHz, 25 kHz Channel

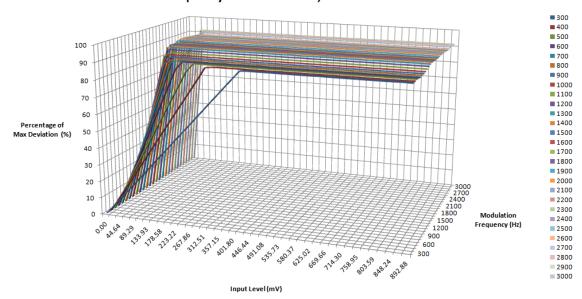


Exhibit 6D- 7: : Percentage Mod -vs- Mod Freq and Input Level - Freq 769.0875 MHz, Ch Sp: 25 kHz

Percentage Modulation Vs Modulation Frequency & Input Level Frequency = 823.9875 MHz, 25 kHz Channel

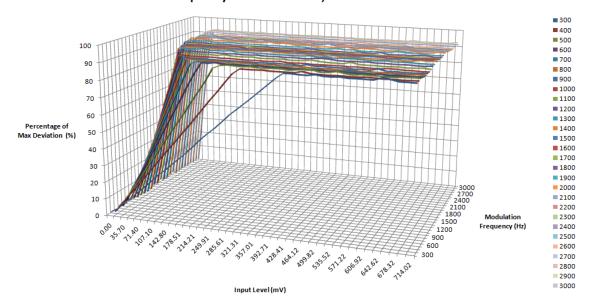


Exhibit 6D- 8: Percentage Mod -vs- Mod Freq and Input Level - Freq 823.9875 MHz, Ch Sp: 25 kHz

Applicant: Motorola Solutions Inc. FCC ID: AZ492FT7089
IC: 109U-92FT7089

Exhibit 6E: Occupied Bandwidth

BANDWIDTH CALCULATIONS:

Carson's Rule for FM modulation is utilized to compute the bandwidth shown in the FCC emission designator. Carson's Rule is: BW = 2*(M+D) where: BW = Bandwidth M = Maximum modulating frequency <math>D = Deviation

Shown below are the calculations required for FCC ID: AZ492FT7089.

Standard Audio Modulation (12.5 kHz Channelization, Analog Voice): Emission Designator 11K0F3E

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 F3E portion of the designator indicates voice.

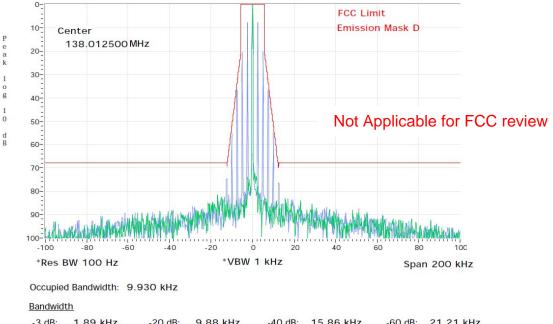
Therefore, the entire designator for 12.5 kHz channelization analog voice is 11K0F3E.

*Note: Transmit frequency range 809-824 MHz and 854-869 MHz require mask 90.691. Mask 90.691 is same as mask G.

Exhibit 6E- 1: Occupied Bandwidth Analog Voice 11K0F3E - Freq 138.0125 MHz, Ch Sp 12.5

Date: Mon, Nov 7, 2016





-3 dB: 1.89 kHz -20 dB: -40 dB: 15.86 kHz -60 dB: 21.21 kHz 9.88 kHz

Exhibit 6E- 2: Occupied Bandwidth Analog Voice 11K0F3E - Freq 158.55 MHz, Ch Sp 12.5 kHz

Date: Mon, Oct 10, 2016

Occupied Bandwidth Analog Voice (12.5K) - 11K0F3E (Part 22)

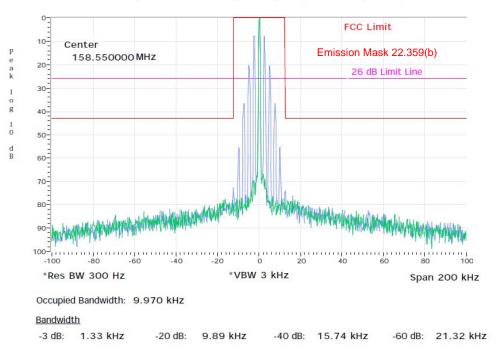
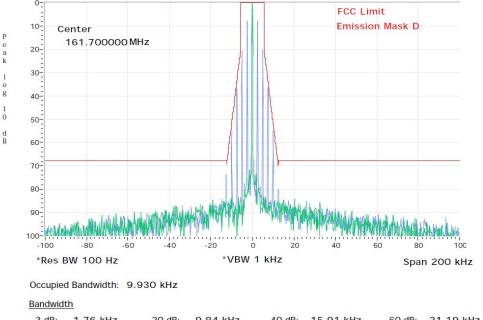


Exhibit 6E- 3: Occupied Bandwidth Analog Voice 11K0F3E - Freq 161.7 MHz, Ch Sp 12.5 kHz

Date: Mon, Nov 7, 2016

Occupied Bandwidth Analog Voice 11K0F3E

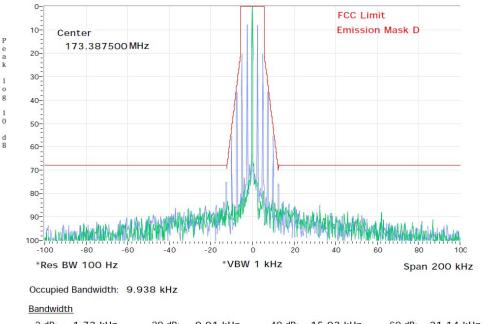


-3 dB: 1.76 kHz -20 dB: 9.84 kHz -40 dB: 15.91 kHz -60 dB: 21.19 kHz

Exhibit 6E- 4: Occupied Bandwidth Analog Voice 11K0F3E - Freq 173.3875 MHz, Ch Sp 12.5 kHz

Date: Mon, Nov 7, 2016



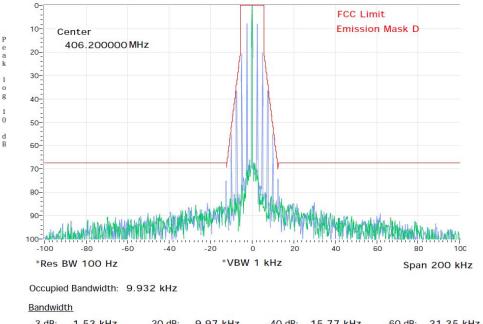


-3 dB: 1.73 kHz -20 dB: 9.91 kHz -40 dB: 15.93 kHz -60 dB: 21.14 kHz

Exhibit 6E- 5: Occupied Bandwidth Analog Voice 11K0F3E - Freq 406.2 MHz, Ch Sp 12.5 kHz

Date: Mon, Nov 7, 2016

Occupied Bandwidth Analog Voice 11K0F3E

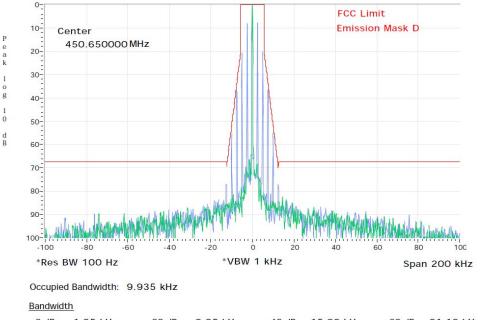


-3 dB: 1.53 kHz -20 dB: 9.97 kHz -40 dB: 15.77 kHz -60 dB: 21.35 kHz

Exhibit 6E- 6: Occupied Bandwidth Analog Voice 11K0F3E - Freq 450.65 MHz, Ch Sp 12.5 kHz

Date: Mon, Nov 7, 2016

Occupied Bandwidth Analog Voice 11K0F3E



-3 dB: 1.35 kHz -20 dB: 9.85 kHz -40 dB: 15.89 kHz -60 dB: 21.19 kHz

Exhibit 6E- 7: Occupied Bandwidth Analog Voice 11K0F3E - Freq 467.775 MHz, Ch Sp 12.5 kHz

Date: Mon, Nov 7, 2016



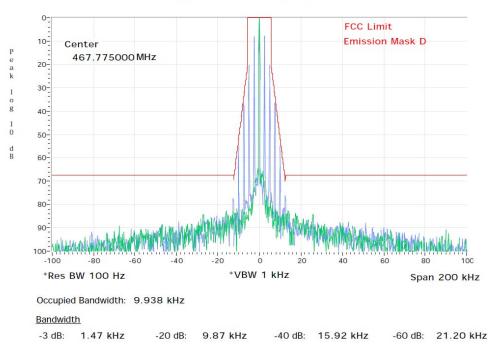
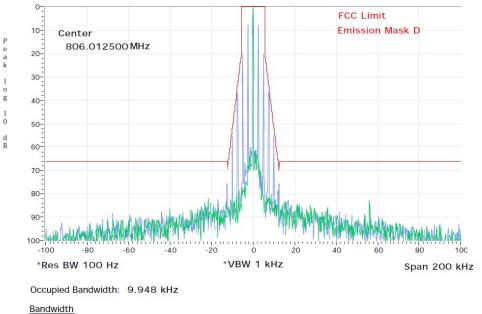


Exhibit 6E- 8: Occupied Bandwidth Analog Voice 11K0F3E - Freq 806.0125 MHz, Ch Sp 12.5 kHz

Date: Tue, Nov 8, 2016

Occupied Bandwidth Analog Voice 11K0F3E

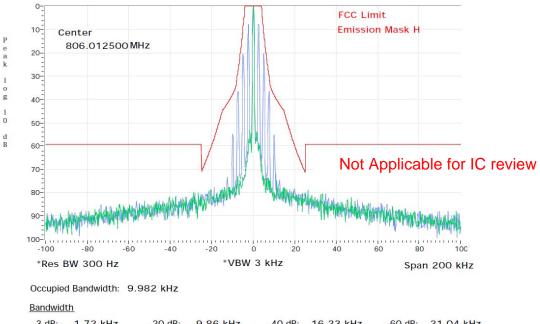


-3 dB: 32.95 kHz -20 dB: 33.74 kHz -40 dB: 34.83 kHz -60 dB: 36.21 kHz

Exhibit 6E- 9: Occupied Bandwidth Analog Voice 11K0F3E - Freq 806.0125 MHz, Ch Sp 12.5 kHz

Date: Tue, Nov 8, 2016

Occupied Bandwidth Analog Voice 11K0F3E



-3 dB: 1.72 kHz -20 dB: 9.86 kHz -40 dB: 16.23 kHz -60 dB: 21.04 kHz

Exhibit 6E- 10: Occupied Bandwidth Analog Voice 11K0F3E - Freq 814.9875 MHz, Ch Sp 12.5 kHz

Date: Wed, Nov 9, 2016

Occupied Bandwidth Analog Voice (12.5 KHz) - 11K0F3E

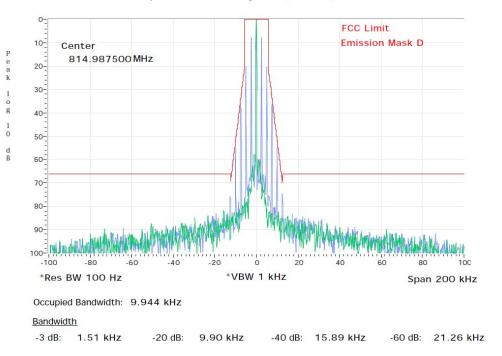
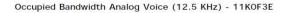
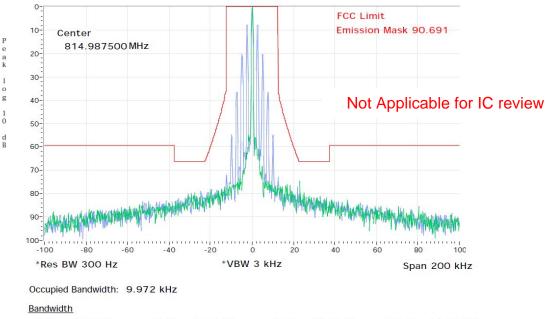


Exhibit 6E- 11: Occupied Bandwidth Analog Voice 11K0F3E - Freq 814.9875MHz, Ch Sp 12.5 kHz

Date: Wed, Nov 16, 2016



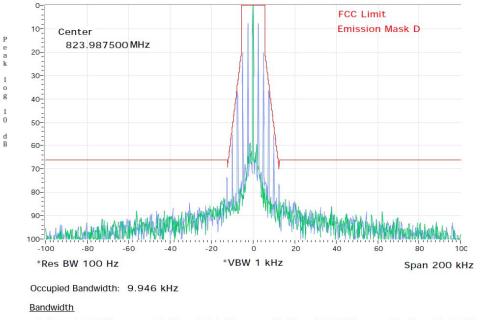


-3 dB: 1.62 kHz -20 dB: 9.84 kHz -40 dB: 15.83 kHz -60 dB: 21.36 kHz

Exhibit 6E- 12: Occupied Bandwidth Analog Voice 11K0F3E - Freq 823.9875 MHz, Ch Sp 12.5 kHz

Date: Tue, Nov 8, 2016

Occupied Bandwidth Analog Voice 11K0F3E



-3 dB: 1.39 kHz -20 dB: 9.91 kHz -40 dB: 15.85 kHz -60 dB: 21.30 kHz

Exhibit 6E- 13: Occupied Bandwidth Analog Voice 11K0F3E - Freq 851.0125 MHz, Ch Sp 12.5 kHz

Date: Tue, Nov 8, 2016

Occupied Bandwidth Analog Voice 11K0F3E

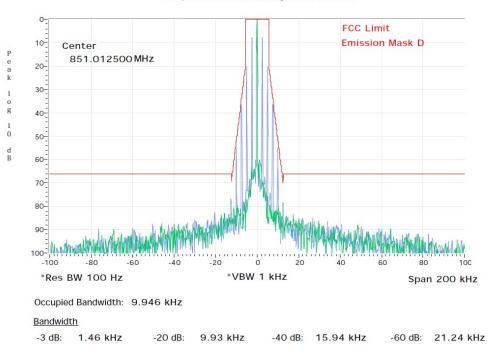


Exhibit 6E- 14: Occupied Bandwidth Analog Voice 11K0F3E - Freq 853.9875 MHz, Ch Sp 12.5 kHz

Date: Tue, Nov 8, 2016

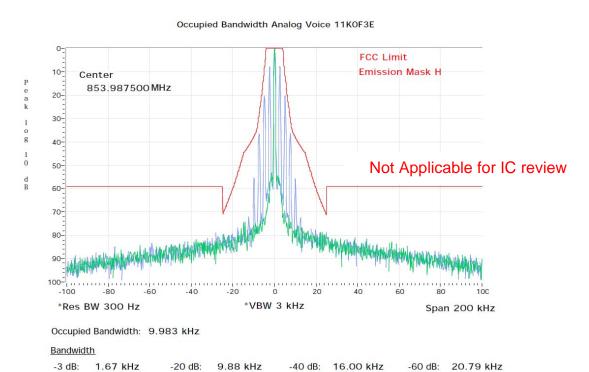


Exhibit 6E- 15: Occupied Bandwidth Analog Voice 11K0F3E - Freq 860.0125 MHz, Ch Sp 12.5 kHz

Date: Wed, Nov 9, 2016

Occupied Bandwidth Analog Voice (12.5 KHz) - 11K0F3E

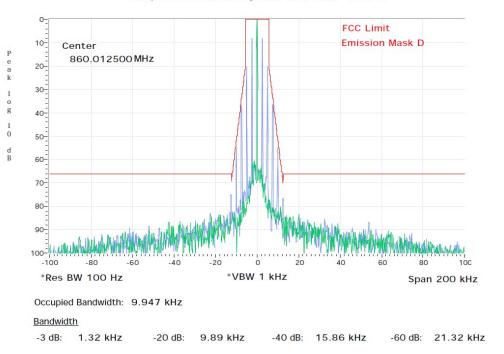


Exhibit 6E- 16: Occupied Bandwidth Analog Voice 11K0F3E - Freq 860.0125 MHz, Ch Sp 12.5 kHz

Date: Wed, Nov 16, 2016

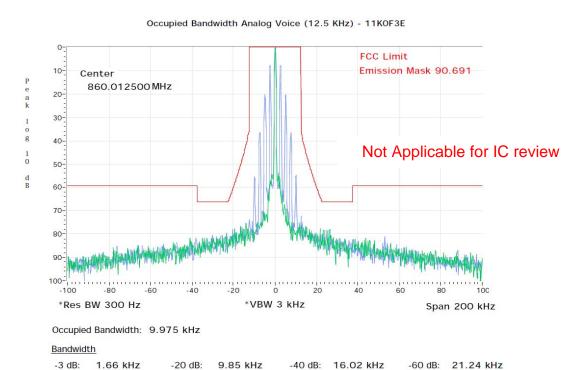
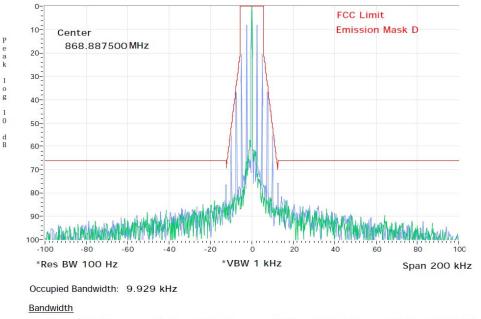


Exhibit 6E- 17: Occupied Bandwidth Analog Voice 11K0F3E - Freq 868.8875 MHz, Ch Sp 12.5 kHz

Date: Tue, Nov 8, 2016

Occupied Bandwidth Analog Voice 11K0F3E



-3 dB: 1.95 kHz -20 dB: 9.81 kHz -40 dB: 15.87 kHz -60 dB: 21.11 kHz

Applicant: Motorola Solutions Inc.

FCC ID: AZ492FT7089 IC: 109U-92FT7089

Standard Audio Modulation (25 kHz Channelization, Analog Voice): Emission Designator 16K0F3E

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 = 3.0 kHz

F3E portion of the designator indicates voice.

Therefore, the entire designator for 25 kHz channelization analog voice is 16K0F3E.

Exhibit 6E- 18: Occupied Bandwidth Analog Voice 16K0F3E - Freq 138.0125 MHz, Ch Sp 25 kHz

Date: Wed, Nov 16, 2016

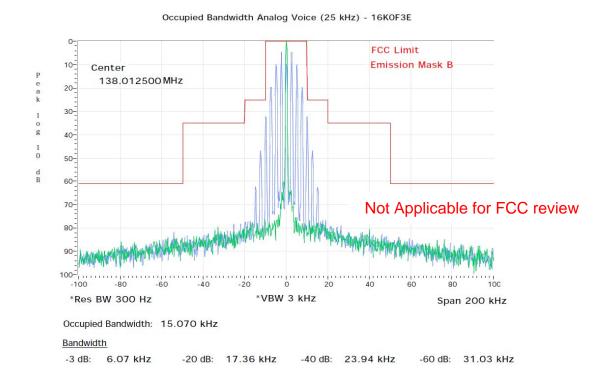
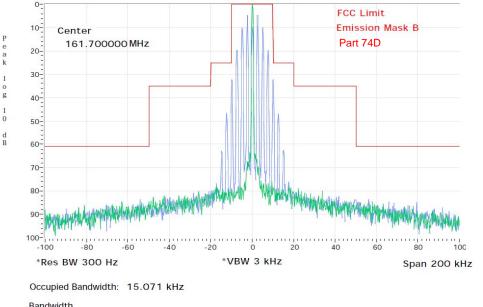


Exhibit 6E- 19: Occupied Bandwidth Analog Voice 16K0F3E - Freq 161.7 MHz, Ch Sp 25 kHz

Date: Wed, Nov 16, 2016

Occupied Bandwidth Analog Voice (25 kHz) - 16K0F3E

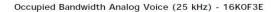


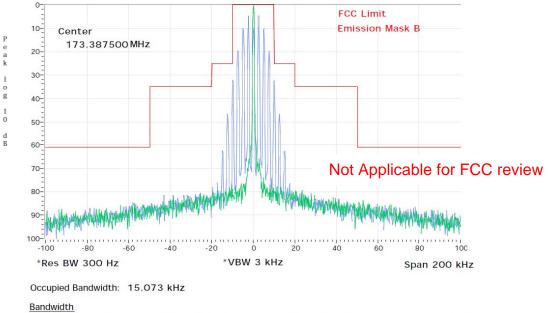
Bandwidth

-3 dB: 6.06 kHz -20 dB: 17.35 kHz -40 dB: 23.96 kHz -60 dB: 30.80 kHz

Exhibit 6E- 20: Occupied Bandwidth Analog Voice 16K0F3E - Freq 173.3875 MHz, Ch Sp 25 kHz

Date: Wed, Nov 16, 2016



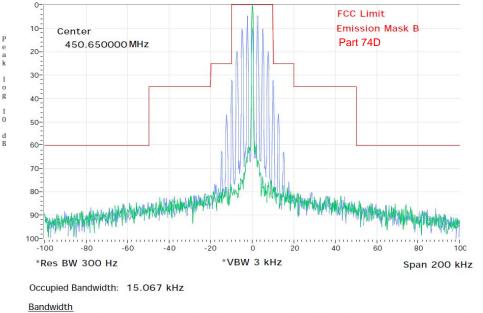


-3 dB: 6.06 kHz -20 dB: 17.36 kHz -40 dB: 23.98 kHz -60 dB: 30.90 kHz

Exhibit 6E- 21: Occupied Bandwidth Analog Voice 16K0F3E - Freq 450.65 MHz, Ch Sp 25

Date: Wed, Nov 16, 2016

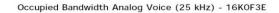


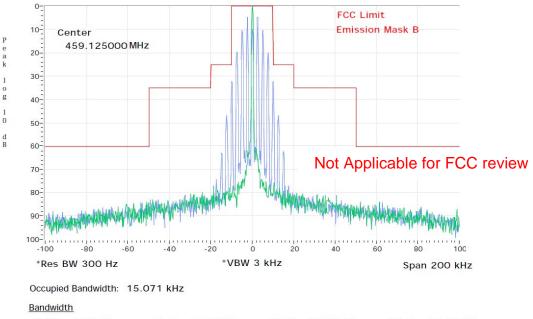


-3 dB: 6.18 kHz -20 dB: 17.35 kHz -40 dB: 23.97 kHz -60 dB: 30.86 kHz

Exhibit 6E- 22: Occupied Bandwidth Analog Voice 16K0F3E - Freq 459.125 MHz, Ch Sp 25 kHz

Date: Wed, Nov 16, 2016





-3 dB: 6.19 kHz -20 dB: 17.36 kHz -40 dB: 23.98 kHz -60 dB: 30.90 kHz

-3 dB: 6.18 kHz

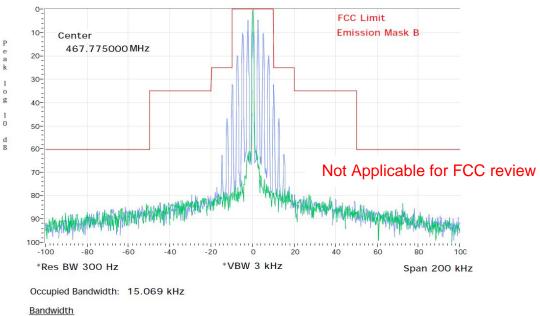
FCC ID: AZ492FT7089 IC: 109U-92FT7089

Exhibit 6E- 23: Occupied Bandwidth Analog Voice 16K0F3E - Freq 467.775 MHz, Ch Sp 25

Date: Wed, Nov 16, 2016

-60 dB: 30.99 kHz





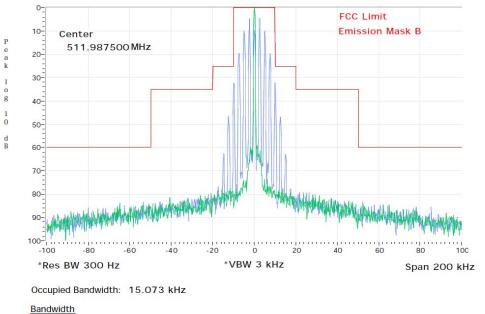
-40 dB: 23.96 kHz

-20 dB: 17.34 kHz

Exhibit 6E- 24: Occupied Bandwidth Analog Voice 16K0F3E - Freq 511.9875 MHz, Ch Sp 25

Date: Wed, Nov 16, 2016

Occupied Bandwidth Analog Voice (25 kHz) - 16K0F3E

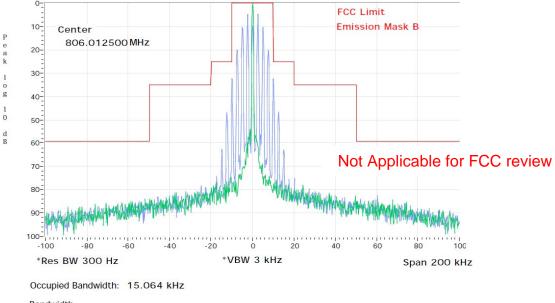


-3 dB: 6.17 kHz -20 dB: 17.37 kHz -40 dB: 23.97 kHz -60 dB: 30.82 kHz

Exhibit 6E- 25: Occupied Bandwidth Analog Voice 16K0F3E - Freq 806.0125 MHz, Ch Sp 25 kHz

Date: Wed, Nov 16, 2016





Bandwidth

-3 dB: 6.12 kHz -20 dB: 17.35 kHz -40 dB: 23.95 kHz -60 dB: 30.91 kHz

Exhibit 6E- 26: Occupied Bandwidth Analog Voice 16K0F3E - Freq 806.0125 MHz, Ch Sp 25 kHz

Date: Fri, Sep 9, 2016

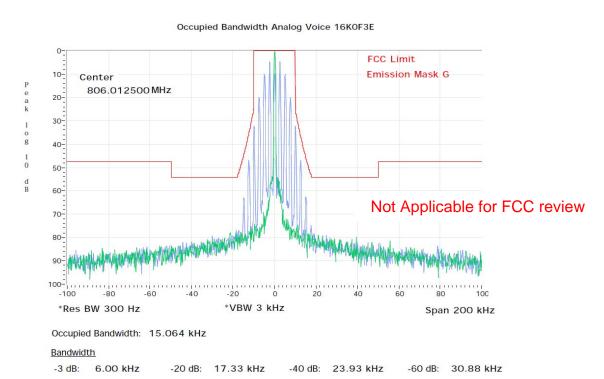
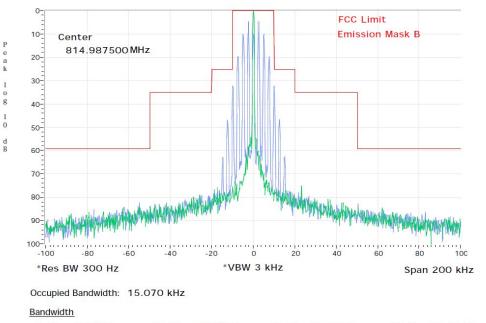


Exhibit 6E- 27: Occupied Bandwidth Analog Voice 16K0F3E - Freq 814.9875 MHz, Ch Sp 25 kHz

Date: Wed, Nov 16, 2016

Occupied Bandwidth Analog Voice (25 kHz) - 16K0F3E

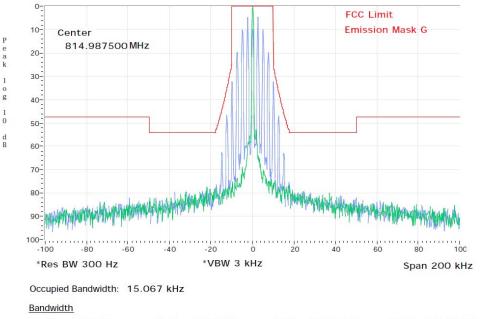


-3 dB: 6.14 kHz -20 dB: 17.36 kHz -40 dB: 23.95 kHz -60 dB: 30.61 kHz

Exhibit 6E- 28: Occupied Bandwidth Analog Voice 16K0F3E - Freq 814.9875 MHz, Ch Sp 25 kHz

Date: Fri, Sep 9, 2016

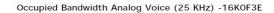
Occupied Bandwidth Analog Voice 16K0F3E

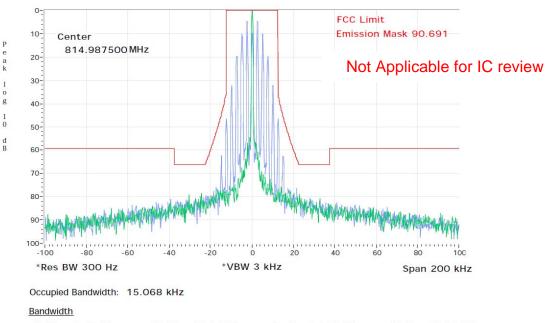


-3 dB: 6.03 kHz -20 dB: 17.33 kHz -40 dB: 23.95 kHz -60 dB: 30.82 kHz

Exhibit 6E- 29: Occupied Bandwidth Analog Voice 16K0F3E - Freq 814.9875 MHz, Ch Sp 25 kHz

Date: Wed, Nov 16, 2016



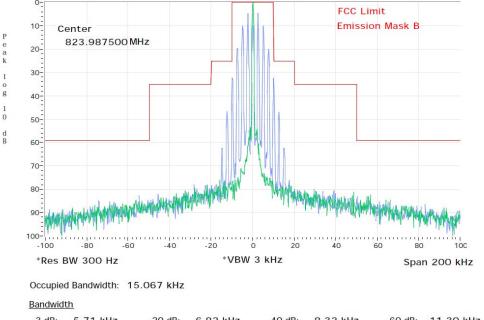


-3 dB: 6.30 kHz -20 dB: 17.44 kHz -40 dB: 24.00 kHz -60 dB: 30.81 kHz

Exhibit 6E- 30: Occupied Bandwidth Analog Voice 16K0F3E - Freq 823.9875 MHz, Ch Sp 25 kHz

Date: Wed, Nov 16, 2016





-3 dB: 5.71 kHz -20 dB: 6.82 kHz -40 dB: 8.32 kHz -60 dB: 11.30 kHz

Exhibit 6E- 31: Occupied Bandwidth Analog Voice 16K0F3E - Freq 823.9875 MHz, Ch Sp 25 kHz

Date: Fri, Sep 9, 2016

Occupied Bandwidth Analog Voice 16K0F3E

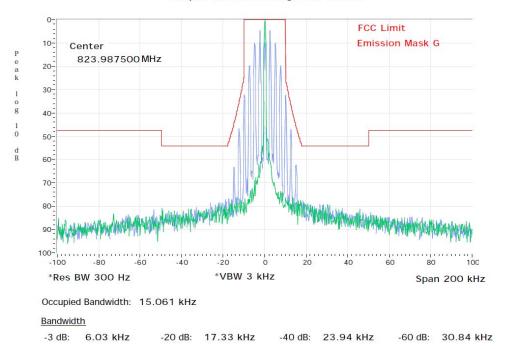
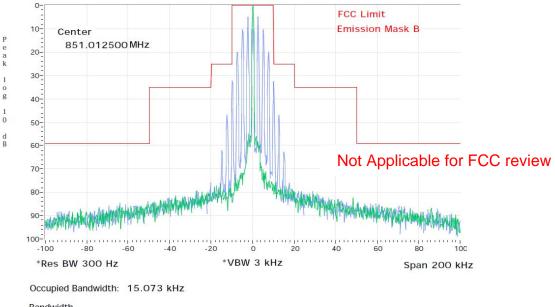


Exhibit 6E- 32: Occupied Bandwidth Analog Voice 16K0F3E - Freq 851.0125 MHz, Ch Sp 25

Date: Wed, Nov 16, 2016





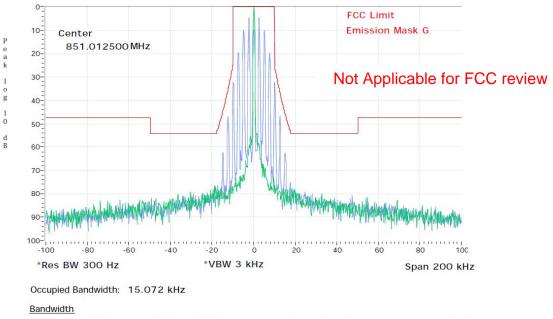
Bandwidth

-3 dB: 6.23 kHz -20 dB: 17.48 kHz -40 dB: 24.11 kHz -60 dB: 31.03 kHz

Exhibit 6E- 33: Occupied Bandwidth Analog Voice 16K0F3E - Freq 851.0125 MHz, Ch Sp 25 kHz

Date: Fri, Sep 9, 2016



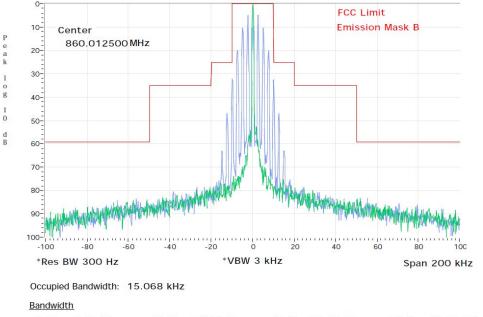


-3 dB: 6.12 kHz -20 dB: 17.35 kHz -40 dB: 23.95 kHz -60 dB: 30.99 kHz

Exhibit 6E- 34: Occupied Bandwidth Analog Voice 16K0F3E - Freq 860.0125 MHz, Ch Sp 25 kHz

Date: Wed, Nov 16, 2016

Occupied Bandwidth Analog Voice (25 kHz) - 16K0F3E

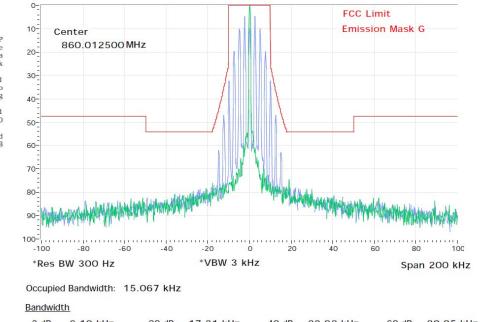


-3 dB: 6.25 kHz -20 dB: 17.33 kHz -40 dB: 23.99 kHz -60 dB: 30.79 kHz

Exhibit 6E- 35: Occupied Bandwidth Analog Voice 16K0F3E - Freq 860.0125 MHz, Ch Sp 25 kHz

Date: Fri, Sep 9, 2016

Occupied Bandwidth Analog Voice 16K0F3E

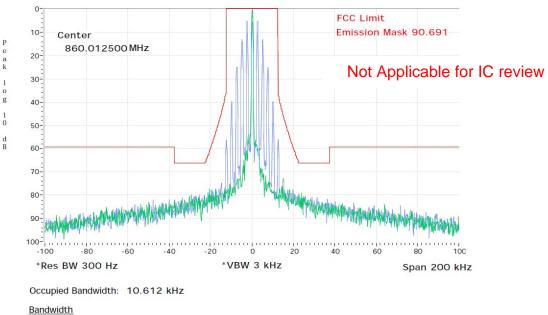


-3 dB: 6.19 kHz -20 dB: 17.31 kHz -40 dB: 23.92 kHz -60 dB: 30.85 kHz

Exhibit 6E-36: Occupied Bandwidth Analog Voice 16K0F3E - Freq 860.0125 MHz, Ch Sp 25

Date: Wed, Nov 16, 2016



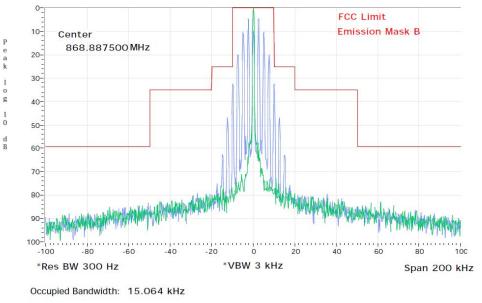


-3 dB: 6.64 kHz -20 dB: 15.12 kHz -40 dB: 21.55 kHz -60 dB: 27.65 kHz

Exhibit 6E- 37: Occupied Bandwidth Analog Voice 16K0F3E - Freq 868.8875 MHz, Ch Sp 25 kHz

Date: Wed, Nov 16, 2016



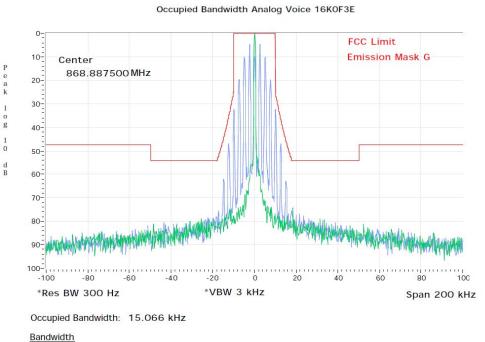


Bandwidth

-3 dB: 6.32 kHz -20 dB: 17.42 kHz -40 dB: 23.92 kHz -60 dB: 30.92 kHz

Exhibit 6E- 38: Occupied Bandwidth Analog Voice 16K0F3E - Freq 868.8875 MHz, Ch Sp 25 kHz

Date: Fri, Sep 9, 2016



-3 dB: 6.17 kHz -20 dB: 17.33 kHz -40 dB: 23.93 kHz -60 dB: 30.93 kHz

Digital (12.5 kHz Channelization, Digital Voice):

Emission Designator 8K10F1E

The 99% energy rule (title 47CFR 2.989) was used for digital mode and is more accurate than Carson's rule. It basically states that 99% of the modulation energy falls within X kHz, in this case, 8.10 kHz. Measurements were performed in accordance with TIA/EIA TSB102.CAAB Section 2.2.5.2.

F1E portion of the designator indicates digital voice.

Therefore, the entire designator for 12.5 kHz channelization digital voice is 8K10F1E.

Exhibit 6E- 39: Occupied Bandwidth Digital Voice 8K10F1E - Freq 138.0125 MHz, Ch Sp 12.5 kHz

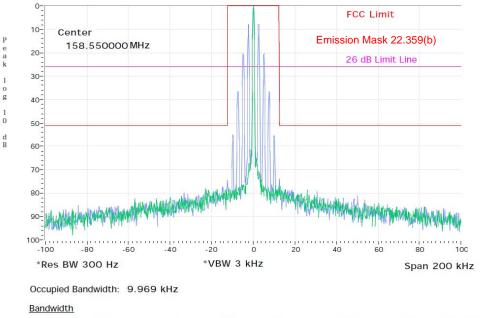
Occupied Bandwidth Digital Voice 8K10F1E **FCC Limit** 10-Center **Emission Mask D** 138.012500 MHz 20-30o g 40-50-Not Applicable for FCC review 60-80--40 *Res BW 100 Hz *VBW 1 kHz Span 200 kHz Occupied Bandwidth: 6.155 kHz Bandwidth -3 dB: 1.16 kHz -20 dB: 7.19 kHz -40 dB: 11.27 kHz -60 dB: 14.08 kHz

Date: Mon, Nov 7, 2016

Exhibit 6E- 40: Occupied Bandwidth Digital Voice 8K10F1E - Freq 158.55 MHz, Ch Sp 12.5 kHz

Date: Fri, Sep 9, 2016



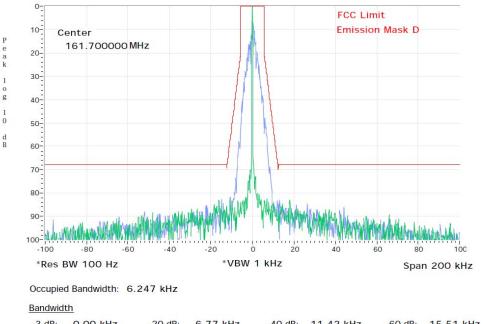


-3 dB: 1.04 kHz -20 dB: 9.82 kHz -40 dB: 15.80 kHz -60 dB: 21.23 kHz

Exhibit 6E- 41: Occupied Bandwidth Digital Voice 8K10F1E - Freq 161.7 MHz, Ch Sp 12.5 kHz

Date: Mon, Nov 7, 2016

Occupied Bandwidth Digital Voice 8K10F1E

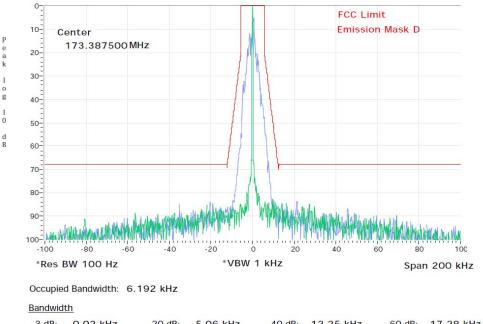


-3 dB: 0.00 kHz -20 dB: 6.77 kHz -40 dB: 11.42 kHz -60 dB: 15.51 kHz

Exhibit 6E- 42: Occupied Bandwidth Digital Voice 8K10F1E - Freq 173.3875 MHz, Ch Sp 12.5 kHz

Date: Mon, Nov 7, 2016

Occupied Bandwidth Digital Voice 8K10F1E

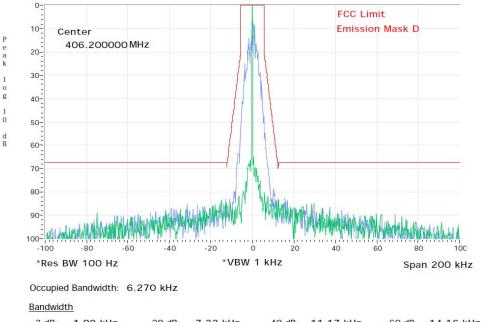


-3 dB: 0.02 kHz -20 dB: 5.06 kHz -40 dB: 12.25 kHz -60 dB: 17.28 kHz

Exhibit 6E- 43: Occupied Bandwidth Digital Voice 8K10F1E - Freq 406.2 MHz, Ch Sp 12.5 kHz

Date: Mon, Nov 7, 2016

Occupied Bandwidth Digital Voice 8K10F1E

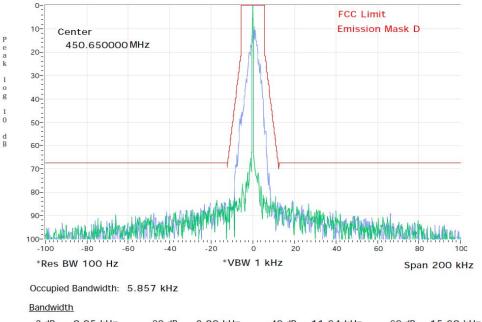


-3 dB: 1.08 kHz -20 dB: 7.33 kHz -40 dB: 11.17 kHz -60 dB: 14.16 kHz

Exhibit 6E- 44: Occupied Bandwidth Digital Voice 8K10F1E - Freq 450.65 MHz, Ch Sp 12.5 kHz

Date: Mon, Nov 7, 2016

Occupied Bandwidth Digital Voice 8K10F1E

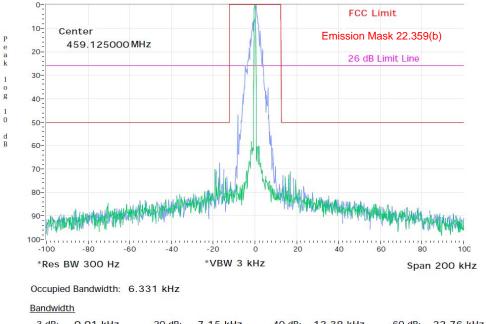


-3 dB: 0.95 kHz -20 dB: 6.89 kHz -40 dB: 11.64 kHz -60 dB: 15.60 kHz

Exhibit 6E- 45: Occupied Bandwidth Digital Voice 8K10F1E - Freq 459.125 MHz, Ch Sp 12.5 kHz

Date: Fri, Sep 16, 2016

Occupied Bandwidth Digital Voice 8K10F1E (Part 22)

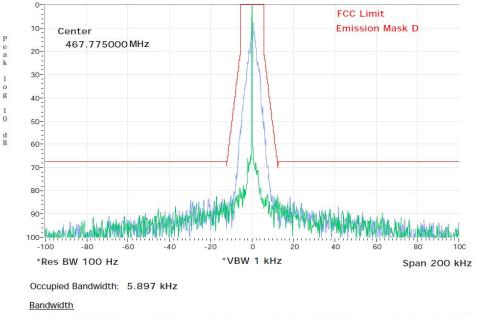


-3 dB: 0.01 kHz -20 dB: 7.15 kHz -40 dB: 12.38 kHz -60 dB: 22.76 kHz

Exhibit 6E- 46: Occupied Bandwidth Digital Voice 8K10F1E - Freq 467.775 MHz, Ch Sp 12.5 kHz

Date: Mon, Nov 7, 2016

Occupied Bandwidth Digital Voice 8K10F1E

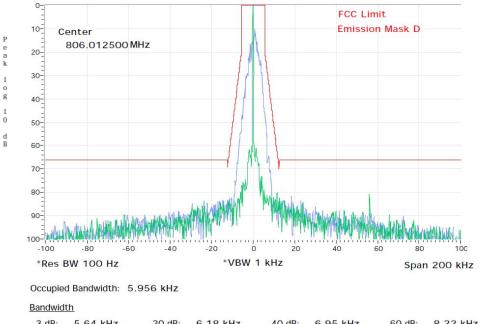


-3 dB: 0.02 kHz -20 dB: 5.98 kHz -40 dB: 11.84 kHz -60 dB: 16.76 kHz

Exhibit 6E- 47: Occupied Bandwidth Digital Voice 8K10F1E - Freq 806.0125 MHz, Ch Sp 12.5 kHz

Date: Tue, Nov 8, 2016

Occupied Bandwidth Digital Voice 8K10F1E



-3 dB: 5.64 kHz -20 dB: 6.18 kHz -40 dB: 6.95 kHz -60 dB: 8.22 kHz