MOTOROLA SOLUTIONS

MS ISO/IEC 17025
TESTING
SAMM No. 0825

**MOTOROLA PENANG ADV. COMM. LABORATORY**
**Motorola Solutions Malaysia Sdn Bhd,**
**Innoplex, Plot 2A, Medan Bayan Lepas,**
**Mukim 12 S.W.D, 11900 Bayan Lepas,**
**Penang, Malaysia.**

**FCC / ISED TEST REPORT**
**Report Revision : Rev.B**

| | | |
|---|---|---|
| **Date/s Tested** | : | 24-July-2018 to 12-Nov-2018 |
| **Manufacturer/Location** | : | Motorola Solutions – Penang |
| **Requestor** | : | HERI NIEVES |
| **Product Type** | : | Mobile |
| **Model Number** | : | M37TSS9PW1AN |
| **Frequency Band** | : | VHF 136-174MHz, UHF1 380-484MHz, UHF2 485-520MHz,700MHz 764-805MHz, 800MHz 806-870MHz |
| **Rated / Max RF Output Power** | : | 1-60 Watts |
| **Applicant Name** | : | Motorola Solutions Malaysia Sdn Bhd |
| **Firmware Version** | : | R17.11.02 |
| **Codeplug Version** | : | B18.00.00.23 |
| **ISED Registrations** | : | 109AK |
| **FCC Test Firm Registrations** | : | 461337 |

**The equipment was tested accordance to the requirement listed below:**

| | |
|---|---|
| **(LMR )**<br>**FCC 47 CFR Part 22/ 74/ 90/ 80**<br>**ISED RSS-Gen/119/ 182** | **PASS** |



Prepared By:

**Zulhairudin Zulkifli**
**Technician**

Approved By:

**Ho SzeKhian**
**Responsible Engineer**

# Table of Contents



REVISION HISTORY

| Revision History | Description | Date | Originator |
|---|---|---|---|
| Rev. A | Initial Report | **08-August-2018** | Zulhairudin Zulkifli |
| Rev. B | Additional test Freq for 800 band | **13-November-2018** | Zulhairudin Zulkifli |

## 1.0. General Information

**EUT Description:**

| | |
|---|---|
| **Technologies** | APX8500 ALL BAND (7/800, VHF, UHF) MOBILE |
| **Modulation Type** | Not Applicable |

The EUT contains following accessory devices and data cable:

| Item | Brand | Model or P/N |
|---|---|---|
| Mobile Radio (SN: 681CTF3538) | MOTOROLA | APX8500 |
| ANTENNA 132-174 3DB GAIN 132-174 MHz | MOTOROLA | HAD4022A |
| Vehicular Roof Mount (494 - 512 MHZ) | MOTOROLA | RAE4016ARB |
| Vehicular Thru-Hole Mount (764-870 MHZ) | MOTOROLA | HAF4014A |
| KEYPAD MICROPHONE | MOTOROLA | HMN4079G |

**General Description of Applied Standards**

The EUT is a Mobile Radio. According to the specifications of the manufacturer, the EUT is to comply with the requirements of the following standards:

**ANSI C63.26.2015**
**ANSI C63.4.2014**

## 2.0. Summary of Test Results

| FCC General Rules Part (47CFR) | IC General Rules Part | Test Item | Result | Remark |
|---|---|---|---|---|
| 22.359, 74.462, 90.210, 80.211(c) | RSS-Gen, RSS-119, RSS-182 | Conducted Spurious Emissions | NA | NA |
| 22.359, 74.462, 90.210, 80.211(c) | RSS-Gen, RSS-119, RSS-182 | Radiated Spurious Emission | Pass | NA |

NA → Not Applicable

## 3.0. Measurement Uncertainty

| Measurement | Frequency | Expended Uncertainty (k=1.96) (±) |
|---|---|---|
| AC Power Line Conducted Spurious Emission | 150KHz ~ 30MHz | 3.43 |
| Radiated Emissions up to 1 GHz | 30MHz ~ 200MHz | 5.01 |
| | 200MHz ~ 1000MHz | 5.01 |
| Radiated Emissions above 1 GHz | 1GHz ~ 18GHz | 5.01 |
| | 18GHz ~ 25GHz | 5.01 |
| Conducted Spurious Emissions | 9kHz ~ 12.75GHz | 2.82 |

## 4.0. Equipment List

### Radiated Emission Station

| DESCRIPTION | MODEL | SERIAL NUMBER | CALIBRATION DATE | CALIBRATION DUE DATE |
|---|---|---|---|---|
| DRG HORN FREQ. | SAS-571 | 719 | 18-Jul-17 | 18-Jul-19 |
| DRG HORN FREQ. | SAS-571 | 720 | 2-Mar-17 | 2-Mar-19 |
| POWER SUPPLY | 6032A | 2615A-01178 | 13-Jun-18 | 13-Jun-19 |
| MICROWAVE SIGNAL GENERATOR | SMP04 | 100131 | 12-Jul-18 | 11-Jul-19 |
| EMI TEST RECEIVER | ESIB26 | 100336 | 6-Jul-18 | 5-Jul-19 |
| EMI TEST RECEIVER | ESIB26 | 100017 | 11-Apr-18 | 11-Apr-19 |
| EMI TEST RECEIVER | ESW44 | 101750 | 25-Jun-18 | 25-Jun-19 |
| SIGNAL ANALYZER | FSV40 | 101103 | 4-Jul-18 | 3-Jul-19 |
| 5m Semi-anechoic Chamber | S800-HX | J2308 | No Cal. Req'd | No Cal. Req'd |
| BILOG ANTENNA | CBL6112D | 30991 | 23-Apr-18 | 23-Apr-19 |
| BILOG ANTENNA | CBL6112B | 2964 | 16-Feb-18 | 16-Feb-20 |
| DATA LOGGER | SDL500 | A.016776 | 18-Mar-17 | 18-Mar-19 |
| SYSTEM CONTROLLER | SC104V | 050806-1 | No Cal. Req'd | No Cal. Req'd |
| TURNTABLE FLUSH MOUNT 2M | FM2011 | NA | No Cal. Req'd | No Cal. Req'd |
| ANTENNA POSITIONING TOWER | TLT2 | NA | No Cal. Req'd | No Cal. Req'd |
| 18 - 40GHz PREAMPLIFIER | Miteq Hi Gain Sucoflex | 002 | No Cal. Req'd | No Cal. Req'd |
| PREAMPLIFIER | PAM-0118P | 361 | No Cal. Req'd | No Cal. Req'd |
| Test Software | EMC_FCC_IC_Bluetooth_RE_Test | | | |
| Version | EMC_FCC_RE_v1.5.1 | | | |

### AC Power Line Conducted Spurious Emission

**Not Applicable**

# 5.0. Test Condition

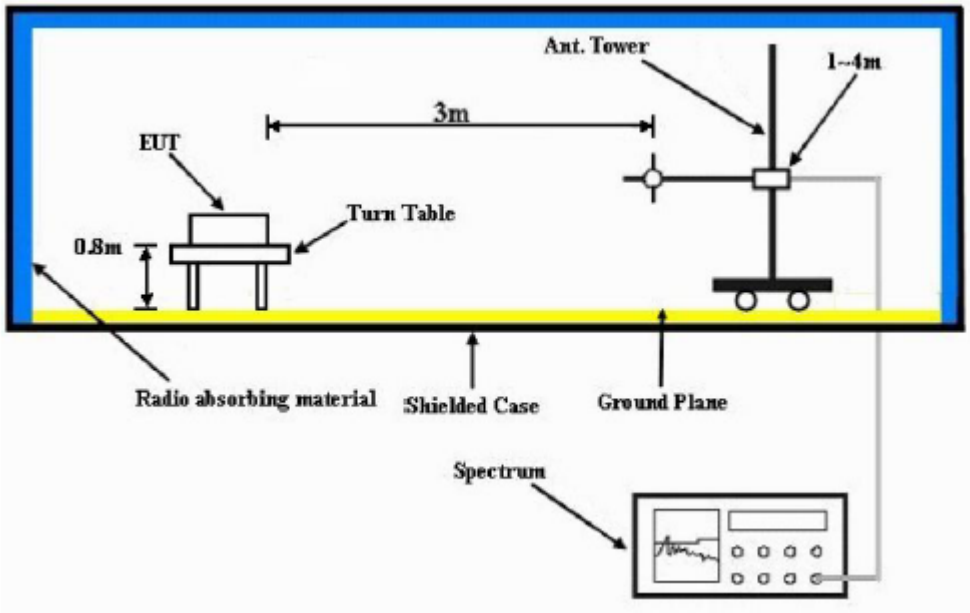
## 5.1 Test Conditions

| Test Item, (Channel Spacing) | Power (W) | Modulation | Test Frequency (MHz) | Tested By |
|---|---|---|---|---|
| **Conducted Spurious Emissions (12.5kHz / 20kHz / 25kHz)** | **Low / Max** | **Analog, 4FSK** | **NA** | **NA** |
| **Radiated Spurious Emission (12.5kHz / 25kHz)** | **Low / Max** | **Analog, 4FSK** | **Rx(MHz) 158.5000,469.9375,775.9875, 805.9125,851.0125**<br><br>**Tx(MHz) 158.5500,459.125,774.8875, 804.9125,814.9875,851.0125** | **Nazrin & Qawiman** |

**NA → Not Applicable**

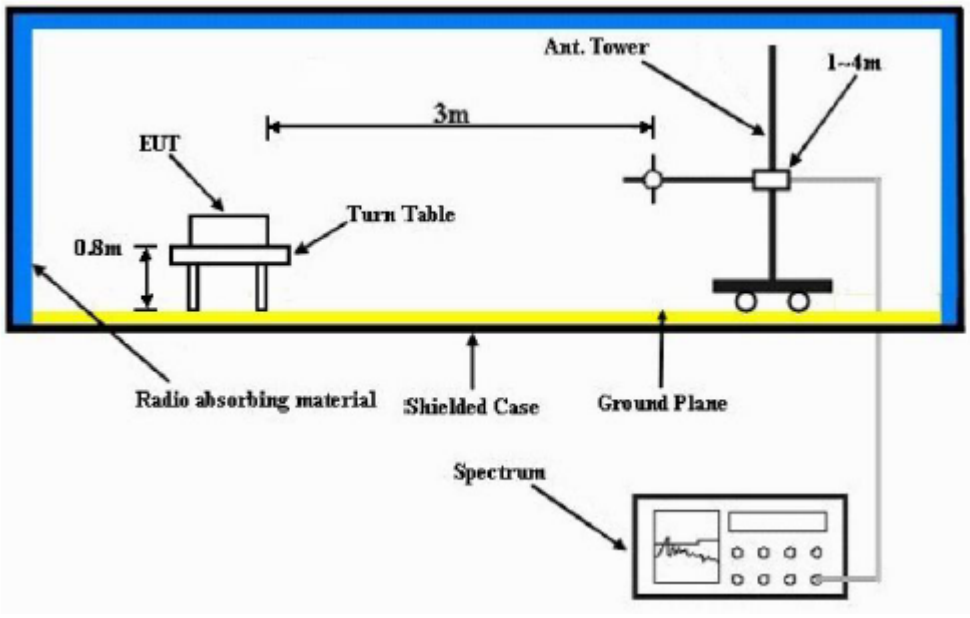
## 6.0. Radiated Spurious Output Power

### 6.0.1. **Test Setup (ANSI C63.26)**




1) The Resolution Bandwidth for scanning Radiated Emission below 1 GHz is 100 kHz with Video Bandwidth = 300 kHz and Resolution Bandwidth for above 1 GHz is 1 MHz with Video Bandwidth = 3 MHz. Detector mode is positive peak.
2) In the semi- anechoic chamber, setup as illustrated above the DUT placed on the 0.8m height (<1Ghz) and 1.5m height (>1Ghz) of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The “Read Value” is the spectrum reading the maximum power value.
3) The substitution antenna is substituted for DUT at the same position and signals generator (S.G) export the CW signal to the substitution antenna via a TX cable. The receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum radiation power. Record the power level of maximum radiation power from spectrum. So, the measured substitution value = Ref level of S.G + TX cables loss – Substituted Antenna Gain.
4) Final Radiated Spurious Emission = “Read Value” + Measured substitution value.

### 6.0.2. Test Setup (ANSI C63.4)




1) The spectrum setting for scanning Radiated Emission below 1 GHz is RBW = 100 kHz, VBW = 300 kHz and above 1 GHz is RBW = 1MHz, VBW = 3MHz. Detector mode is positive peak. For exploratory testing.
2) Final is done using QP Detector (<1Ghz) and Peak and Average Detector (>1Ghz).
3) In the semi-anechoic chamber, setup as illustrated above the EUT placed on the 0.8m height of Turn table. For each radiated spurious emissions component detected, rotate the turn table around 360 degrees to search the maximum radiated spurious emissions and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum radiated spurious emissions. The “Read Value” is the spectrum reading the maximum radiated spurious emissions.
4) Final Radiated Spurious Emission (dBuV/m) = “Read Value (dBuV)” + Cable Loss (dB) +Antenna Gain (dB/m)-Pre-amp Gain (dB)

### 6.0.3. Test Result

**Motorola Solutions.** **FCC ID: AZ492FT7089, IC ID: 109U-92FT7089**

**Test: SAC Receiver Radiated Emission**

**Model#: M37TSS9PW1AN** **S/N: 681CTF3538** **EMC SR ID#: 03466-EMC-00044**

**Battery: NA** **Accessory: 3466-HMN4079G-3, HAD4022A**

**Test Mode: RX Analog** **Test Frequency: 158.5000 MHz 25 kHz** **60.00 Watt(s)/Max Power**

**Test Standard: ANSI C63.4-2014**

**Radiated Emission tabular data**

| Spur Freq (MHz) | Spur level QPK (dBµV/m) | Spur level PK (dBµV/m) | Spur level AV (dBµV/m) | Limit QPK (dBµV/m) | Limit PK (dBµV/m) | Limit AV (dBµV/m) | Margin QPK (dBµV/m) | Margin PK (dBµV/m) | Margin AV (dBµV/m) | Carrier PK Power (dBµV/m) |
|---|---|---|---|---|---|---|---|---|---|---|
| **Vertical Radiated Emission Result** | | | | | | | | | | |
| 35.9779 | 35.1433 | - | - | 40.0000 | - | - | 4.8567 | - | - | - |
| 155.9989 | 24.2760 | - | - | 43.5000 | - | - | 19.2240 | - | - | - |
| 239.9198 | 25.0924 * | - | - | 46.0000 | - | - | 20.9076 | - | - | - |
| 302.9556 | 16.6494 * | - | - | 46.0000 | - | - | 29.3506 | - | - | - |
| 384.0269 | 23.3159 * | - | - | 46.0000 | - | - | 22.6841 | - | - | - |
| 886.2035 | 18.6171 * | - | - | 46.0000 | - | - | 27.3829 | - | - | - |
| **Horizontal Radiated Emission Result** | | | | | | | | | | |
| 35.9699 | 22.2922 | - | - | 40.0000 | - | - | 17.7078 | - | - | - |
| 155.9829 | 33.7137 | - | - | 43.5000 | - | - | 9.7863 | - | - | - |
| 239.9779 | 31.0573 | - | - | 46.0000 | - | - | 14.9427 | - | - | - |
| 302.3203 | 19.0003 * | - | - | 46.0000 | - | - | 26.9997 | - | - | - |
| 384.0029 | 31.3209 | - | - | 46.0000 | - | - | 14.6791 | - | - | - |
| 885.9550 | 18.5703 * | - | - | 46.0000 | - | - | 27.4297 | - | - | - |

| Remarks: Pass Result | Marginal Result | Fail Result |
|---|---|---|

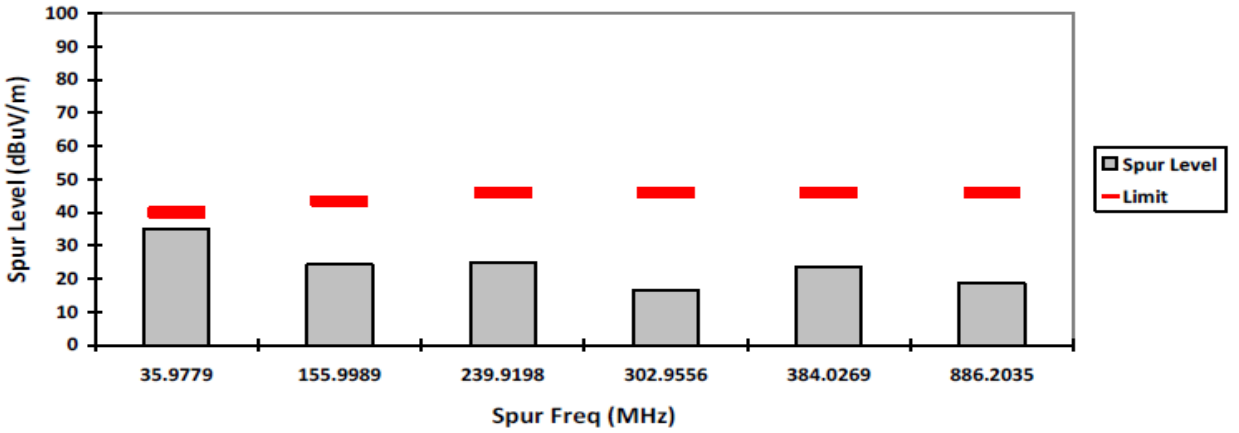
**Temperature (degC): 23.5** **Humidity (%): 70.3**

**Test Performed by: Nazrin & Qawiman** **Test Date: Wed, Jul 25, 2018**

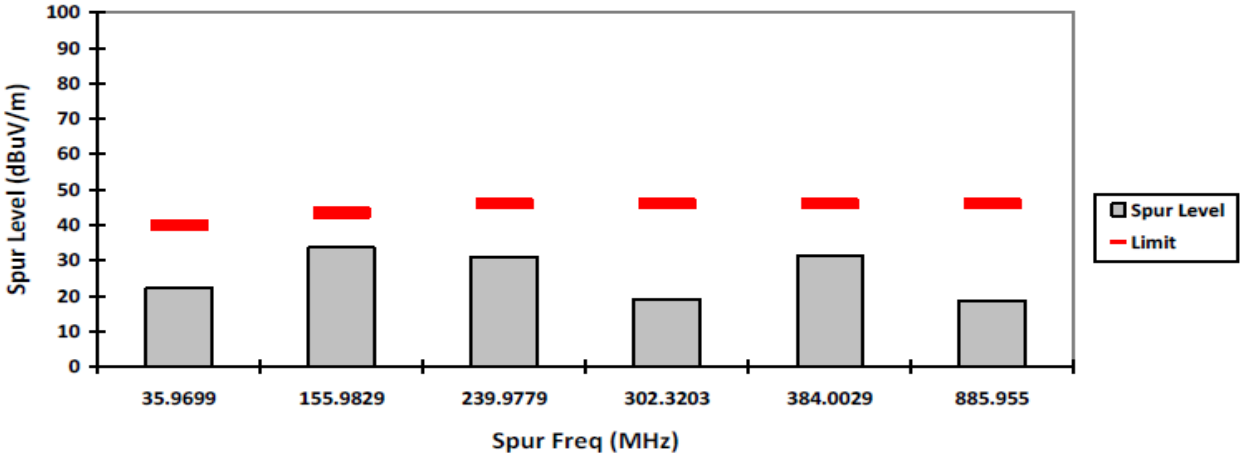
**System MU: 5.01dB**

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

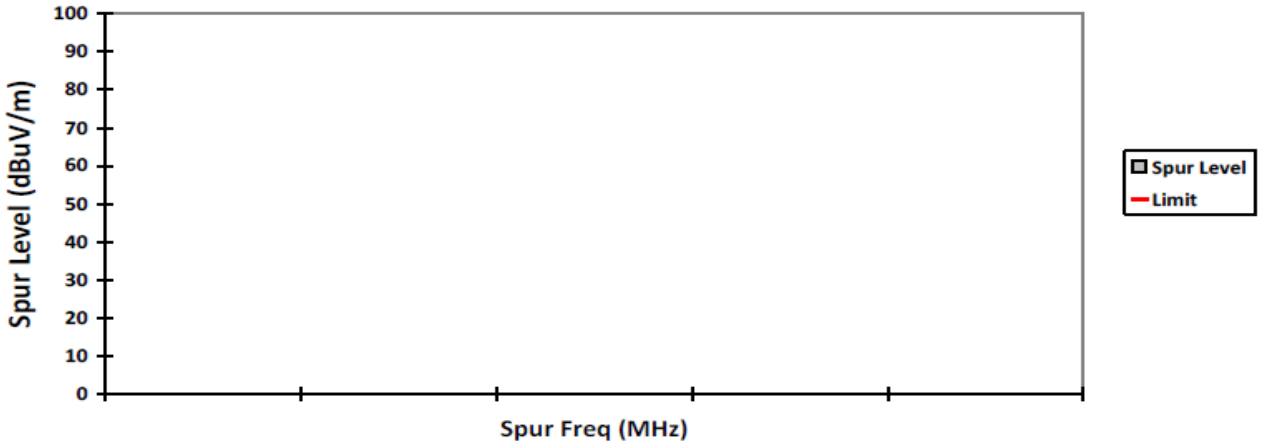
**VERTICAL, QPK**



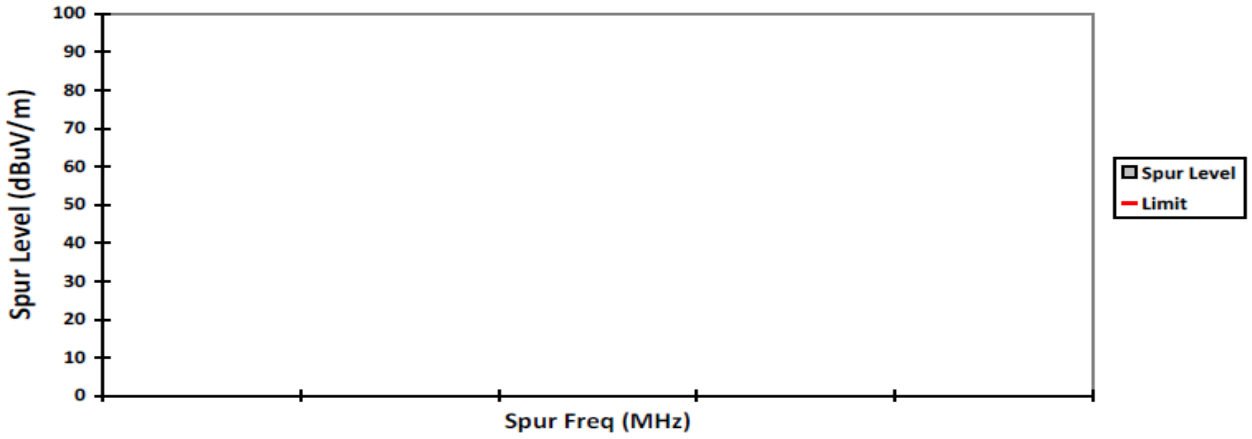

**HORIZONTAL, QPK**



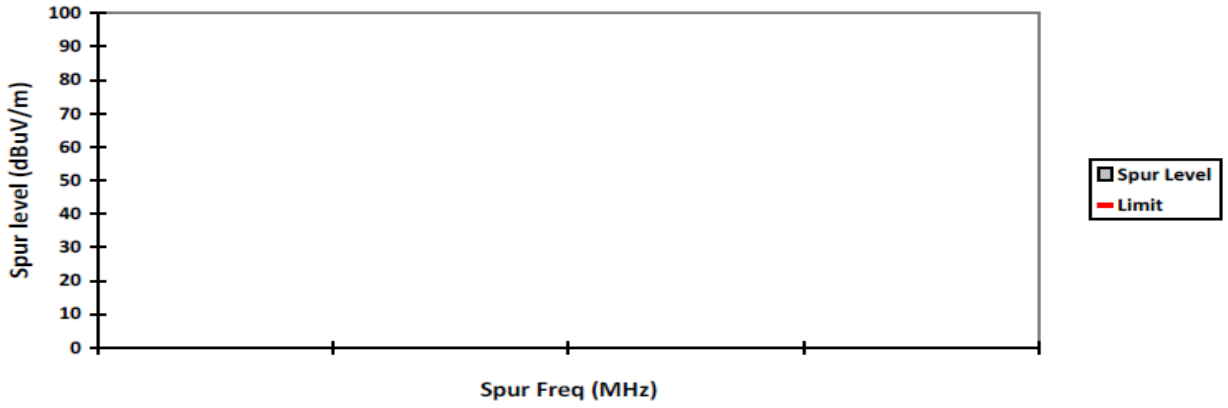

**VERTICAL, PK**



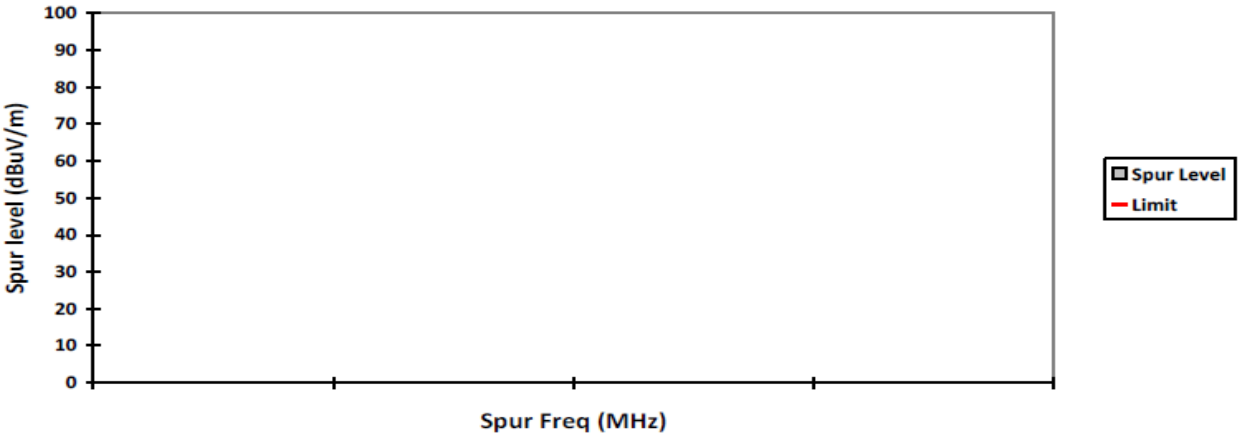
HORIZONTAL, PK




VERTICAL, AV




HORIZONTAL, AV



**Motorola Solutions.** **FCC ID: AZ492FT7089, IC ID: 109U-92FT7089**

**Test: SAC Receiver Radiated Emission**

**Model#: M37TSS9PW1AN** **S/N: 681CTF3538** **EMC SR ID#: 03466-EMC-00044**

**Battery: NA** **Accessory: 3466-HMN4079G-3, RAE4016ARB**

**Test Mode: RX Analog** **Test Frequency: 469.9375 MHz 25 kHz** **54.00 Watt(s)/Max Power**

**Test Standard: ANSI C63.4-2014**

## Radiated Emission tabular data

| Vertical Radiated Emission Result | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Spur Freq (MHz) | Spur level QPK (dBµV/m) | Spur level PK (dBµV/m) | Spur level AV (dBµV/m) | Limit QPK (dBµV/m) | Limit PK (dBµV/m) | Limit AV (dBµV/m) | Margin QPK (dBµV/m) | Margin PK (dBµV/m) | Margin AV (dBµV/m) | Carrier PK Power (dBµV/m) |
| 36.0011 | 34.5512 | - | - | 40.0000 | - | - | 5.4488 | - | - | - |
| 60.0077 | 18.0454 * | - | - | 40.0000 | - | - | 21.9546 | - | - | - |
| 155.9372 | 23.1813 * | - | - | 43.5000 | - | - | 20.3187 | - | - | - |
| 168.0312 | 18.4871 * | - | - | 43.5000 | - | - | 25.0129 | - | - | - |
| 240.0401 | 23.7187 * | - | - | 46.0000 | - | - | 22.2813 | - | - | - |
| 384.0329 | 21.8605 * | - | - | 46.0000 | - | - | 24.1395 | - | - | - |
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| **Horizontal Radiated Emission Result** | | | | | | | | | | |
| 36.0492 | 21.1103 | - | - | 40.0000 | - | - | 18.8897 | - | - | - |
| 60.0578 | 14.0551 * | - | - | 40.0000 | - | - | 25.9449 | - | - | - |
| 155.9572 | 33.6900 | - | - | 43.5000 | - | - | 9.8100 | - | - | - |
| 167.4420 | 22.1494 * | - | - | 43.5000 | - | - | 21.3506 | - | - | - |
| 239.9619 | 32.2242 | - | - | 46.0000 | - | - | 13.7758 | - | - | - |
| 384.0189 | 30.0287 | - | - | 46.0000 | - | - | 15.9713 | - | - | - |
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| Remarks: Pass Result | Marginal Result | Fail Result |
|---|---|---|

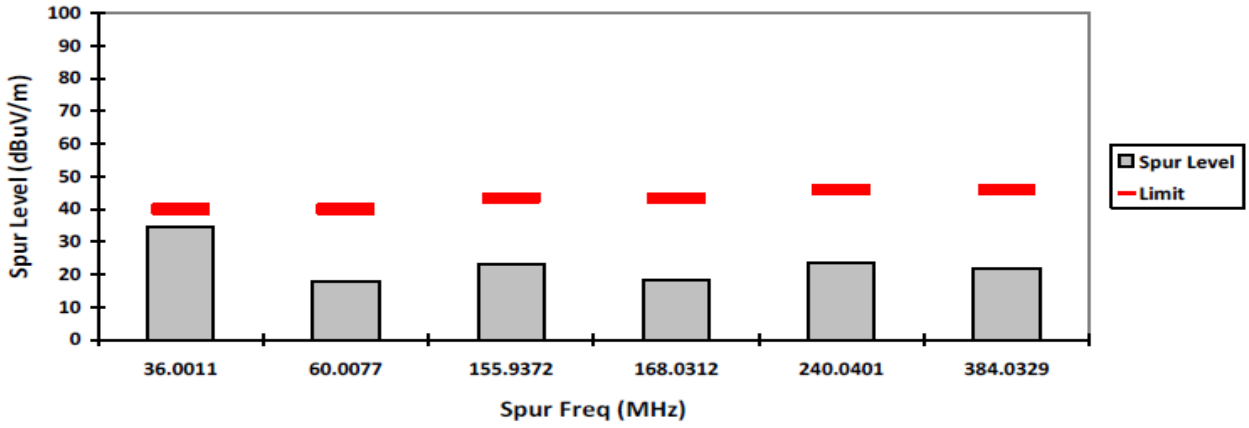
**Temperature (degC): 23.5** **Humidity (%): 70.3**

**Test Performed by: Nazrin & Qawiman** **Test Date: Wed, Jul 25, 2018**

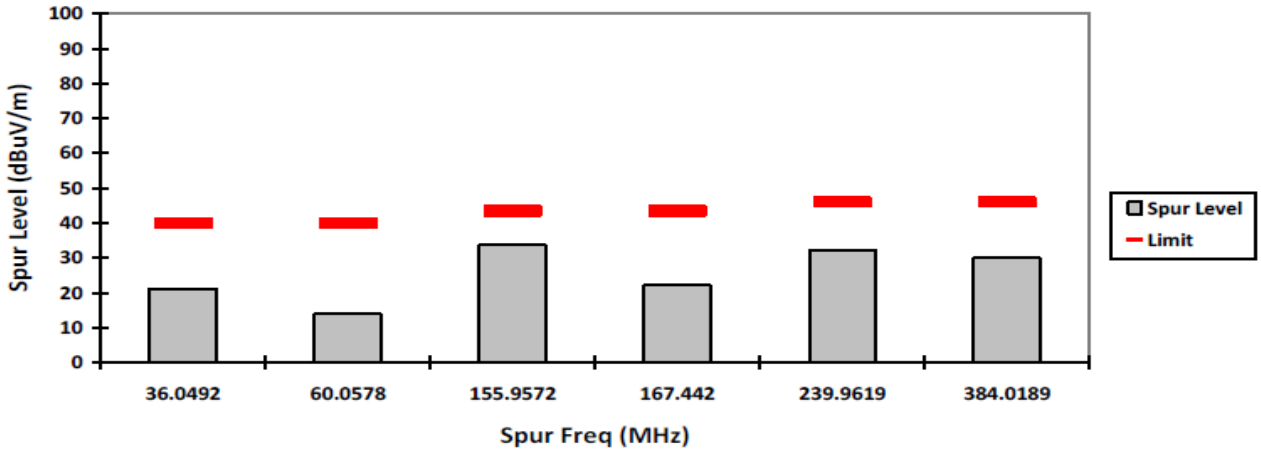
**System MU: 5.01dB**

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

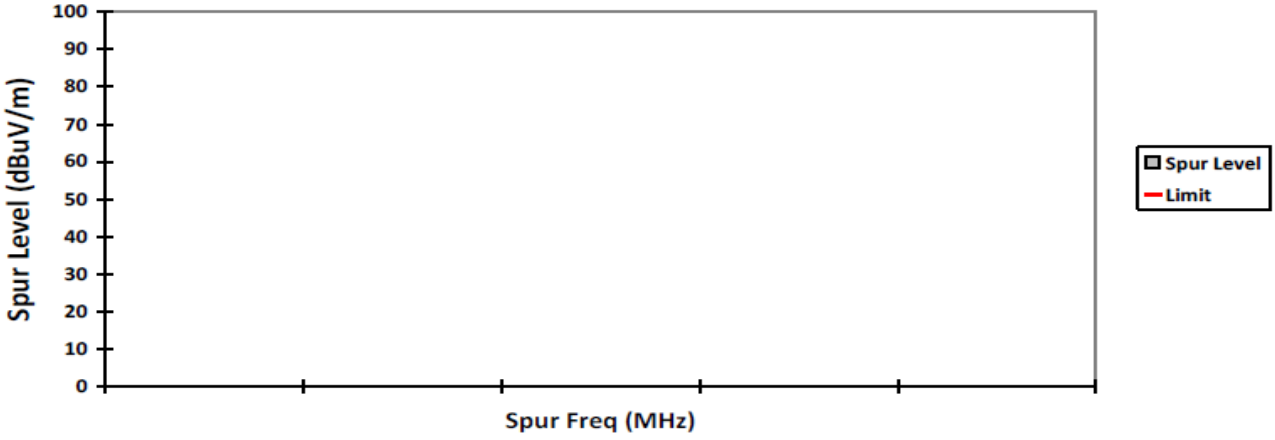
**VERTICAL, QPK**



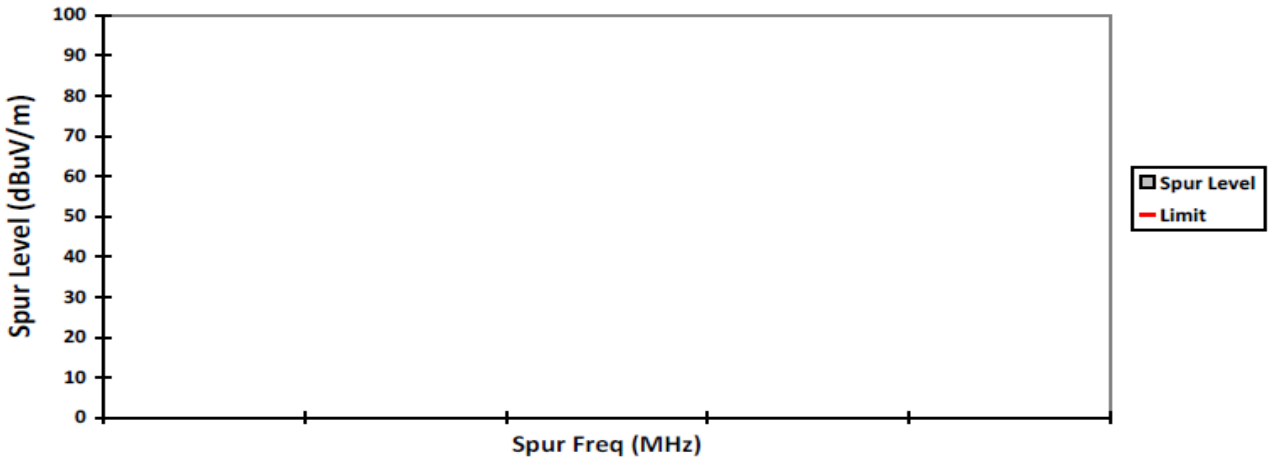

**HORIZONTAL, QPK**



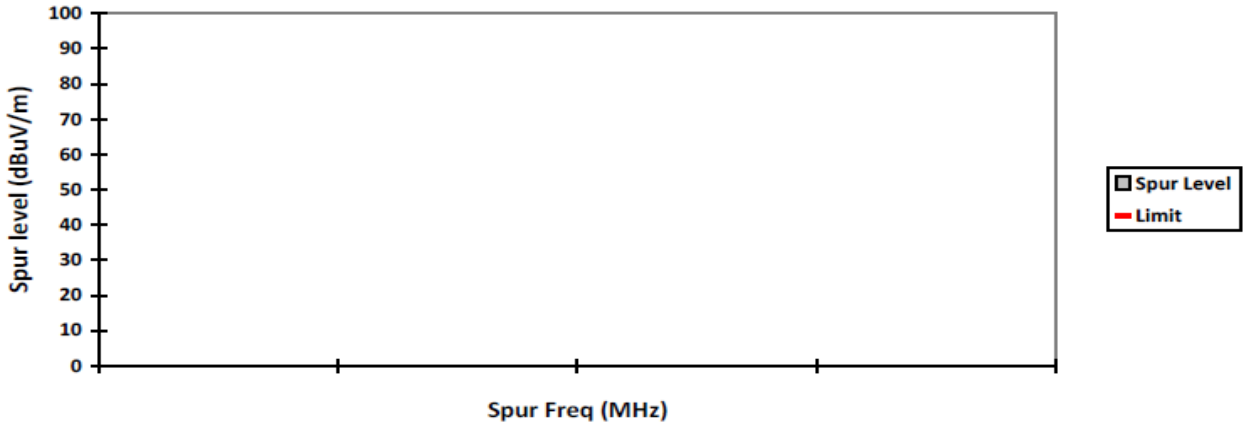

**VERTICAL, PK**



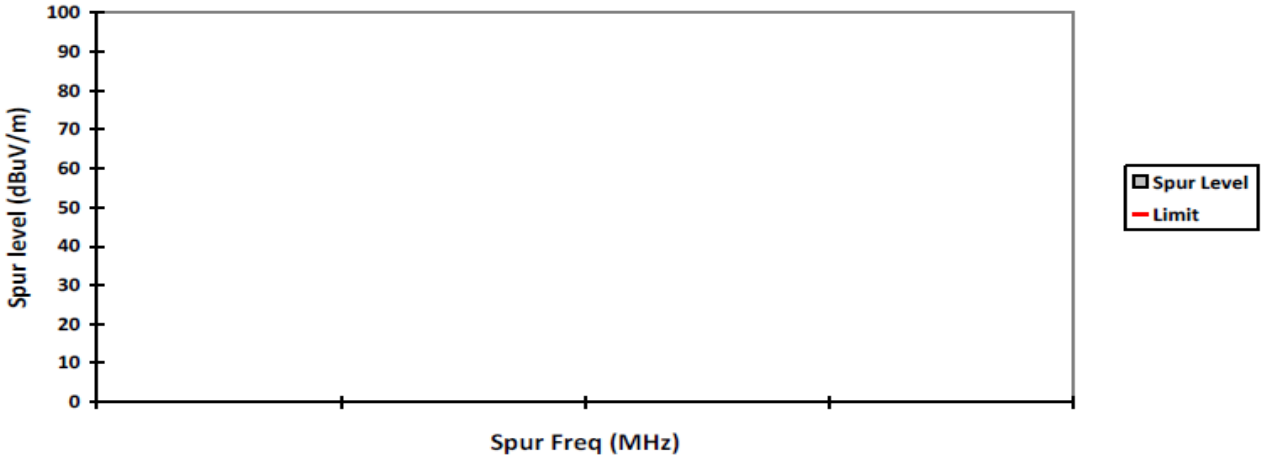
HORIZONTAL, PK




VERTICAL, AV




HORIZONTAL, AV



**Motorola Solutions.** **FCC ID: AZ492FT7089, IC ID: 109U-92FT7089**

**Test: SAC Receiver Radiated Emission**

**Model#: M37TSS9PW1AN** **S/N: 681CTF3538** **EMC SR ID#: 03466-EMC-00044**

**Battery: NA** **Accessory: 3466-HMN4079G-3, HAF4014A**

**Test Mode: RX Analog** **Test Frequency: 775.9875 MHz 12.5 kHz** **36.00 Watt(s)/Max Power**

**Test Standard: ANSI C63.4-2014**

## Radiated Emission tabular data

| Vertical Radiated Emission Result | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Spur Freq (MHz) | Spur level QPK (dBµV/m) | Spur level PK (dBµV/m) | Spur level AV (dBµV/m) | Limit QPK (dBµV/m) | Limit PK (dBµV/m) | Limit AV (dBµV/m) | Margin QPK (dBµV/m) | Margin PK (dBµV/m) | Margin AV (dBµV/m) | Carrier PK Power (dBµV/m) |
| 33.0334 | 20.6525 | - | - | 40.0000 | - | - | 19.3475 | - | - | - |
| 35.5932 | 21.6999 | - | - | 40.0000 | - | - | 18.3001 | - | - | - |
| 156.1555 | 18.8493 * | - | - | 43.5000 | - | - | 24.6507 | - | - | - |
| 239.9451 | 23.5420 * | - | - | 46.0000 | - | - | 22.4580 | - | - | - |
| 305.5241 | 19.7982 * | - | - | 46.0000 | - | - | 26.2018 | - | - | - |
| 383.9908 | 22.1352 * | - | - | 46.0000 | - | - | 23.8648 | - | - | - |
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| **Horizontal Radiated Emission Result** | | | | | | | | | | |
| 32.9853 | 17.9681 * | - | - | 40.0000 | - | - | 22.0319 | - | - | - |
| 35.9800 | 19.7872 * | - | - | 40.0000 | - | - | 20.2128 | - | - | - |
| 155.9851 | 33.1835 | - | - | 43.5000 | - | - | 10.3165 | - | - | - |
| 239.9872 | 30.4837 | - | - | 46.0000 | - | - | 15.5163 | - | - | - |
| 305.4680 | 19.4623 * | - | - | 46.0000 | - | - | 26.5377 | - | - | - |
| 384.0129 | 30.5822 | - | - | 46.0000 | - | - | 15.4178 | - | - | - |
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| Remarks: Pass Result | Marginal Result | Fail Result |
|---|---|---|

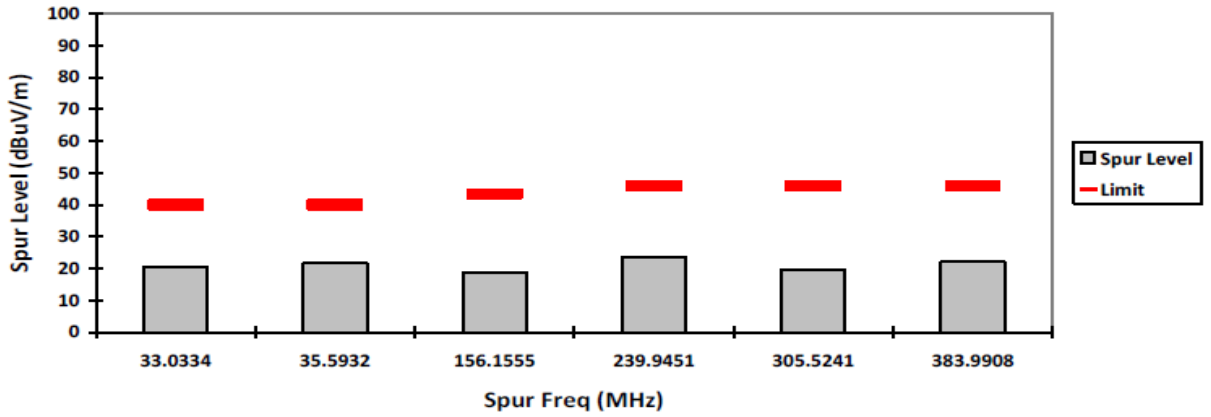
**Temperature (degC): 23.5** **Humidity (%): 70.3**

**Test Performed by: Nazrin & Qawiman** **Test Date: Wed, Jul 25, 2018**

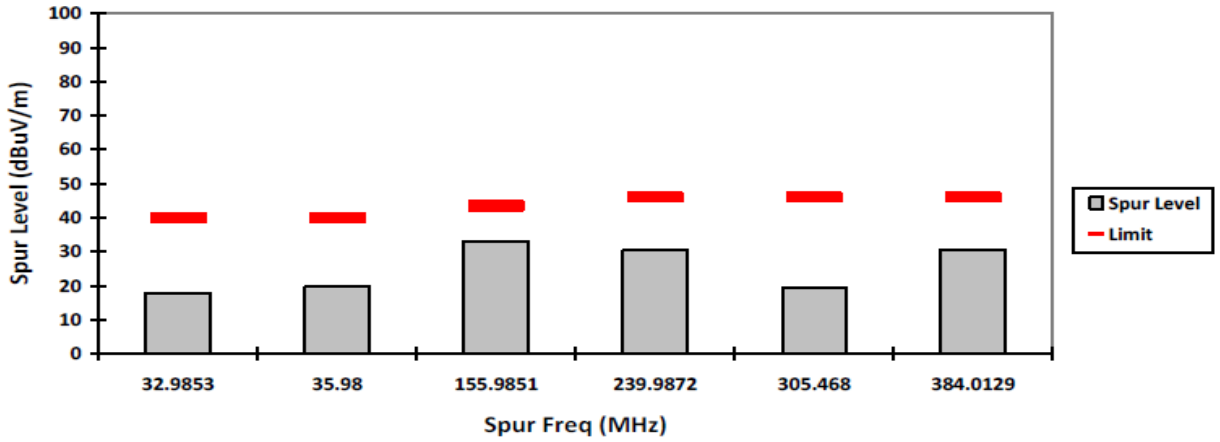
**System MU: 5.01dB**

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

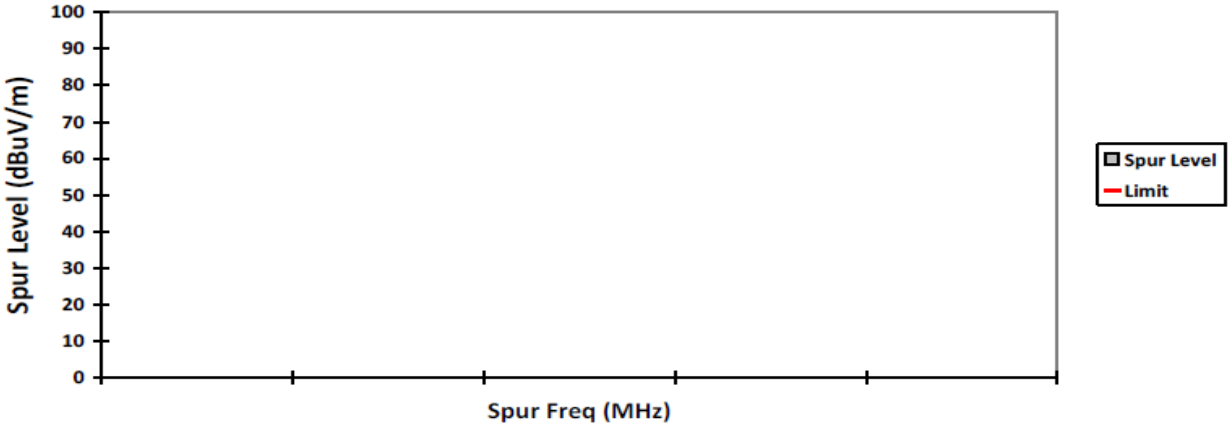
**VERTICAL, QPK**



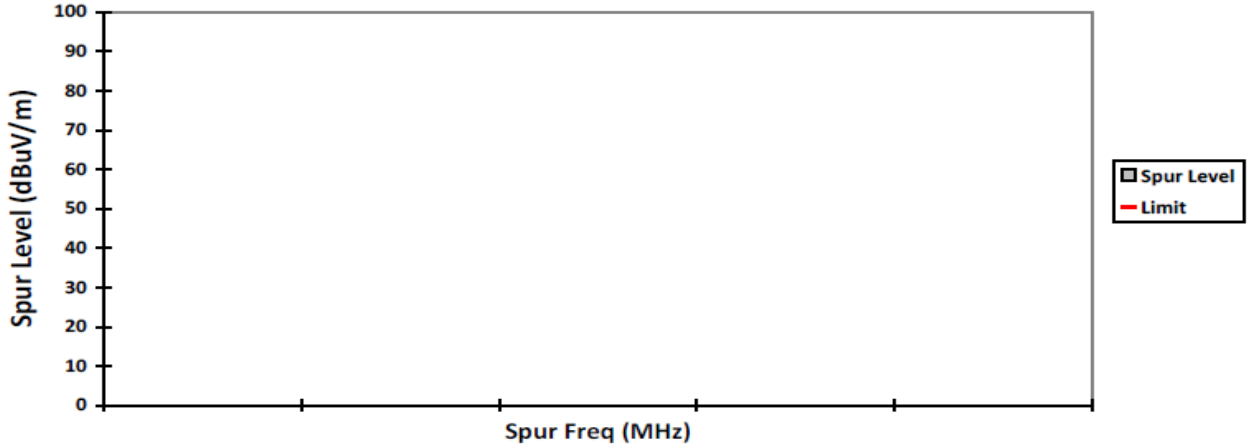

**HORIZONTAL, QPK**



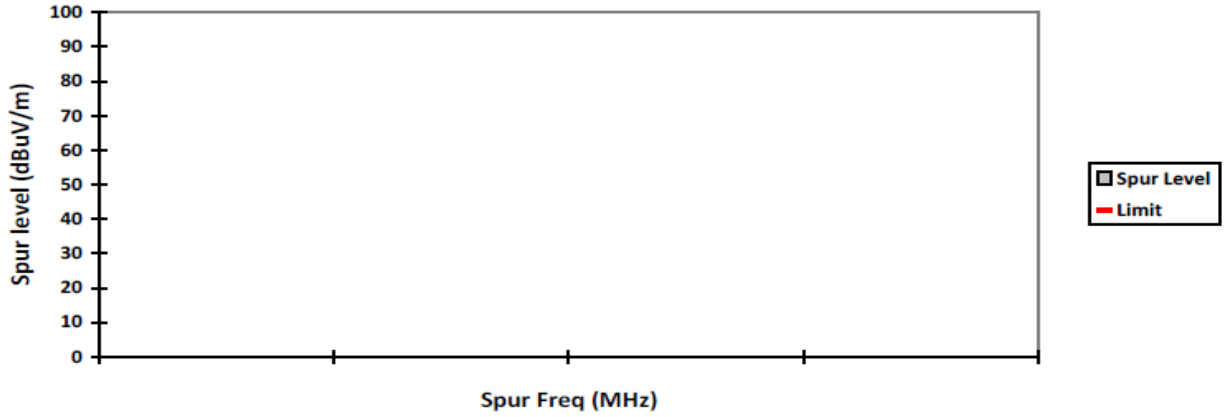

**VERTICAL, PK**



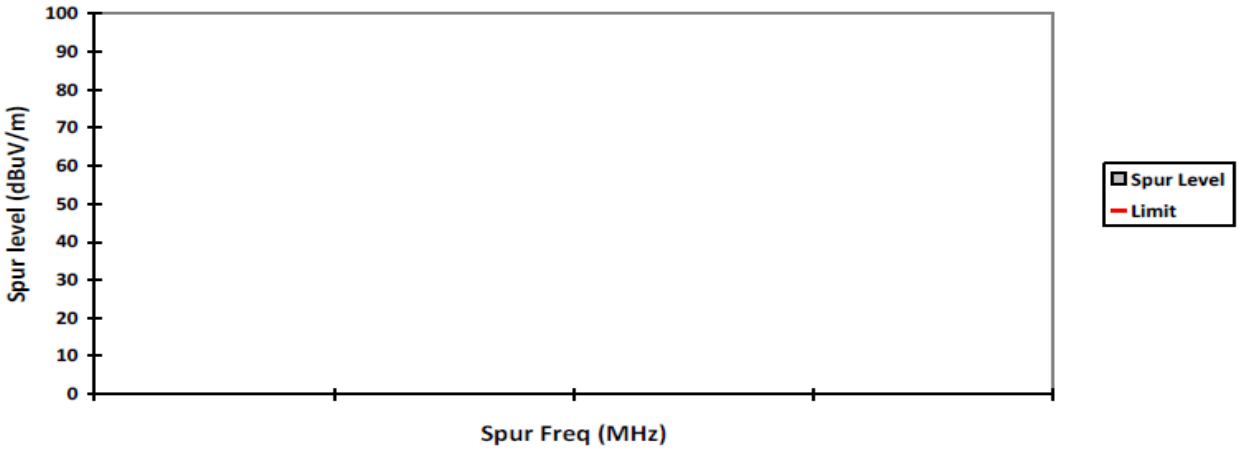
**HORIZONTAL, PK**




**VERTICAL, AV**




**HORIZONTAL, AV**



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

**Test: SAC Receiver Radiated Emission**

**Model#: M37TSS9PW1AN S/N: 681CTF3538 EMC SR ID#: 03466-EMC-00044**
**Battery: NA Accessory: 3466-HMN4079G-3, HAF4014A**
**Test Mode: RX Analog Test Frequency: 805.9125 MHz 12.5 kHz 36.00 Watt(s)/Max Power**
**Test Standard: ANSI C63.4-2014**

## Radiated Emission tabular data

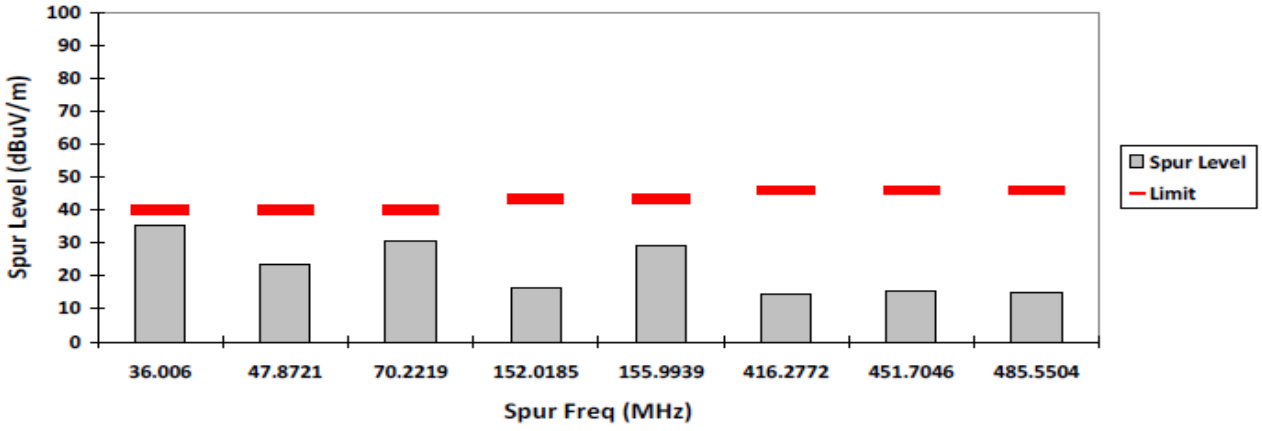
| Vertical Radiated Emission Result | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Spur Freq (MHz) | Spur level QPK (dBµV/m) | Spur level PK (dBµV/m) | Spur level AV (dBµV/m) | Limit QPK (dBµV/m) | Limit PK (dBµV/m) | Limit AV (dBµV/m) | Margin QPK (dBµV/m) | Margin PK (dBµV/m) | Margin AV (dBµV/m) | Carrier PK Power (dBµV/m) |
| 36.0060 | 35.1937 | - | - | 40.0000 | - | - | 4.8063 | - | - | - |
| 47.8721 | 23.5773 | - | - | 40.0000 | - | - | 16.4227 | - | - | - |
| 70.2219 | 30.6901 | - | - | 40.0000 | - | - | 9.3099 | - | - | - |
| 152.0185 | 16.6079 * | - | - | 43.5000 | - | - | 26.8921 | - | - | - |
| 155.9939 | 29.0619 | - | - | 43.5000 | - | - | 14.4381 | - | - | - |
| 416.2772 | 14.2570 * | - | - | 46.0000 | - | - | 31.7430 | - | - | - |
| 451.7046 | 15.5709 * | - | - | 46.0000 | - | - | 30.4291 | - | - | - |
| 485.5504 | 15.0268 * | - | - | 46.0000 | - | - | 30.9732 | - | - | - |
| **Horizontal Radiated Emission Result** | | | | | | | | | | |
| 35.9551 | 21.8738 | - | - | 40.0000 | - | - | 18.1262 | - | - | - |
| 47.9161 | 24.2430 | - | - | 40.0000 | - | - | 15.7570 | - | - | - |
| 69.6595 | 27.7809 | - | - | 40.0000 | - | - | 12.2191 | - | - | - |
| 152.5809 | 14.9497 * | - | - | 43.5000 | - | - | 28.5503 | - | - | - |
| 156.0379 | 35.0725 | - | - | 43.5000 | - | - | 8.4275 | - | - | - |
| 416.6988 | 14.3507 * | - | - | 46.0000 | - | - | 31.6493 | - | - | - |
| 450.9004 | 14.9146 * | - | - | 46.0000 | - | - | 31.0854 | - | - | - |
| 486.2028 | 15.0172 * | - | - | 46.0000 | - | - | 30.9828 | - | - | - |

| Remarks: Pass Result | Marginal Result | Fail Result |
|---|---|---|

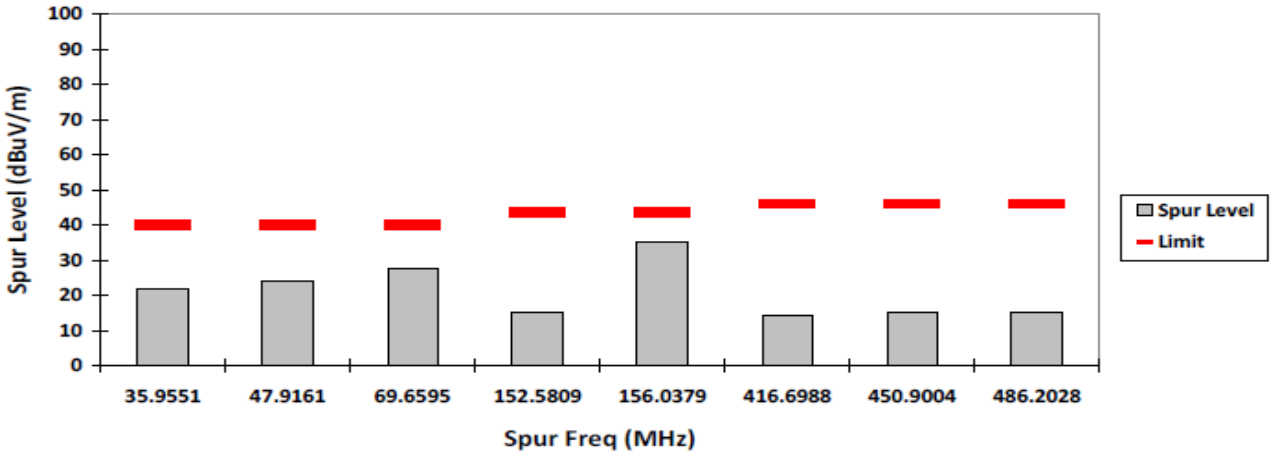
**Temperature (degC): 23.4** **Humidity (%): 70.1**
**Test Performed by: Nazrin&Qawiman** **Test Date: Sat, Nov 10, 2018**
**System MU: 5.01dB**

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

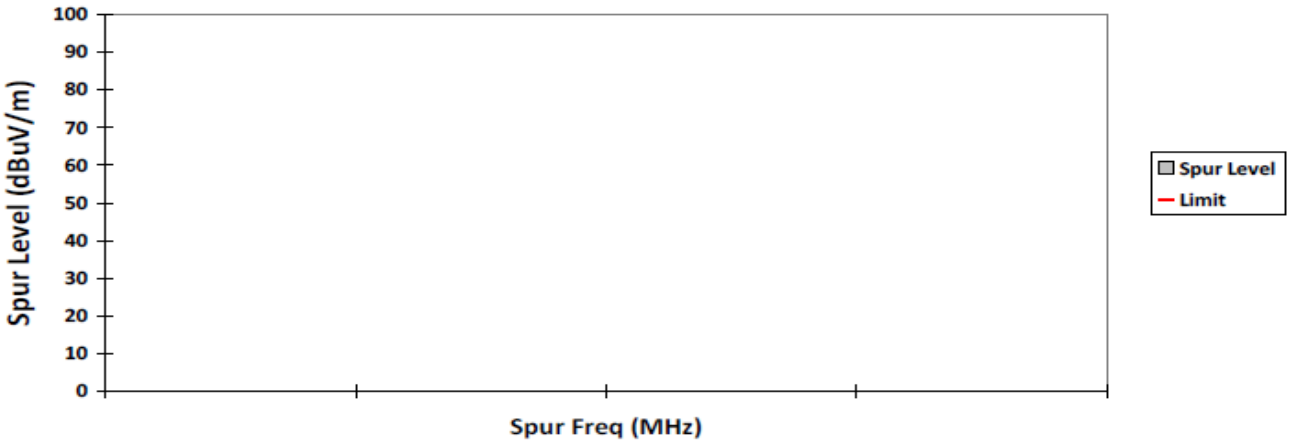
VERTICAL, QPK



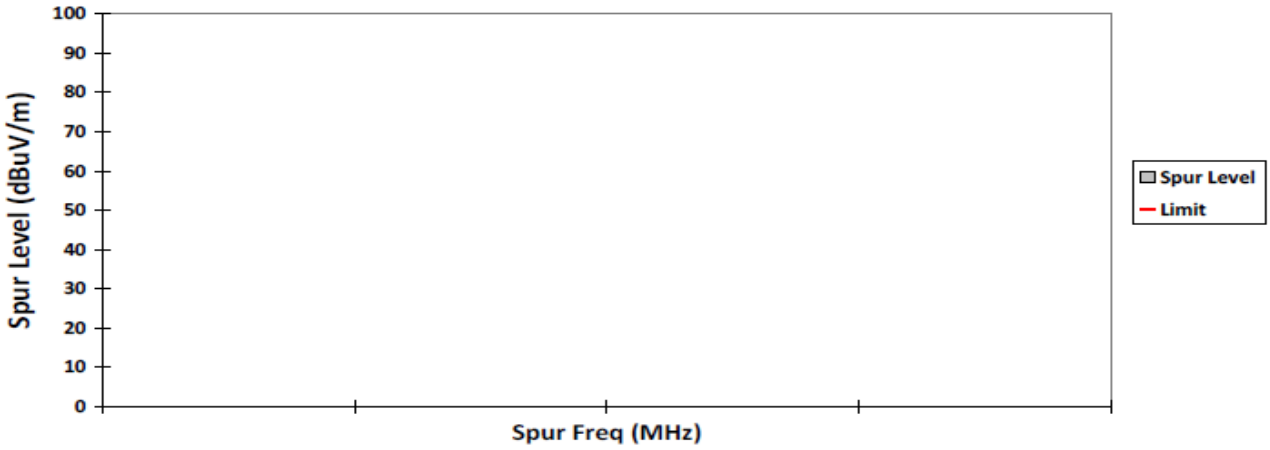

HORIZONTAL, QPK



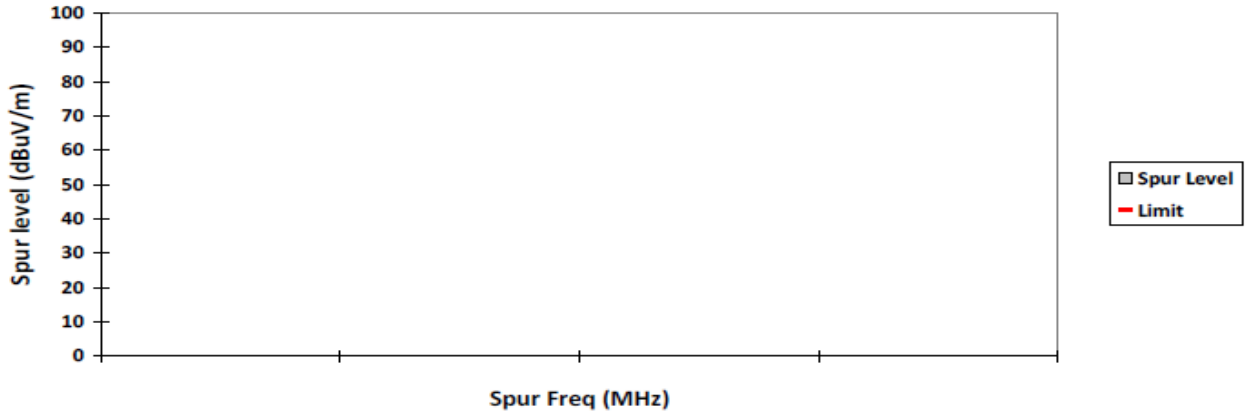

VERTICAL, PK



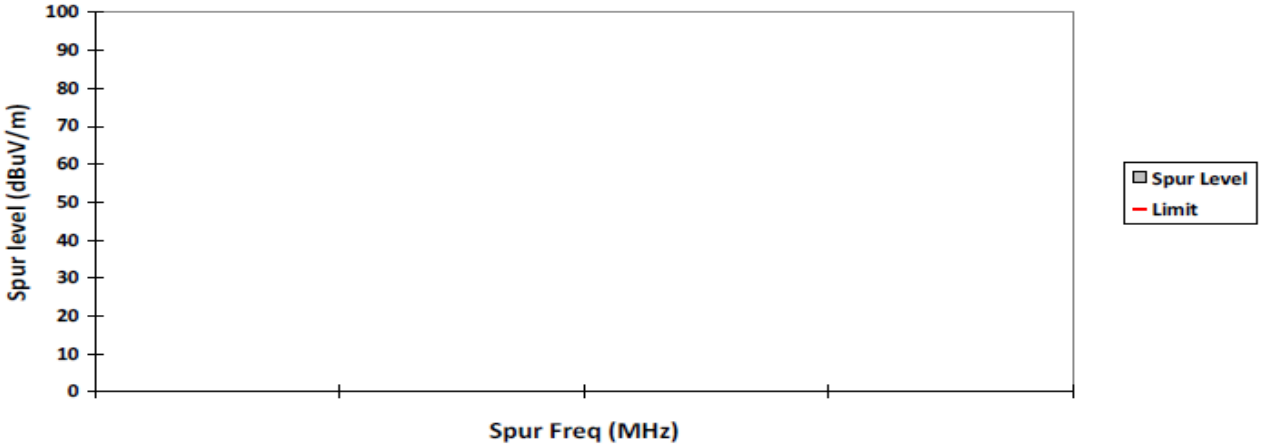
HORIZONTAL, PK




VERTICAL, AV




HORIZONTAL, AV



**Motorola Solutions.** **FCC ID: AZ492FT7089, IC ID: 109U-92FT7089**

**Test: SAC Receiver Radiated Emission**

**Model#: M37TSS9PW1AN** **S/N: 681CTF3538** **EMC SR ID#: 03466-EMC-00044**

**Battery: NA** **Accessory: 3466-HMN4079G-3, HAF4014A**

**Test Mode: RX Analog** **Test Frequency: 851.0125 MHz 25 kHz** **42.00 Watt(s)/Max Power**

**Test Standard: ANSI C63.4-2014**

## Radiated Emission tabular data

| Spur Freq (MHz) | Spur level QPK (dBµV/m) | Spur level PK (dBµV/m) | Spur level AV (dBµV/m) | Limit QPK (dBµV/m) | Limit PK (dBµV/m) | Limit AV (dBµV/m) | Margin QPK (dBµV/m) | Margin PK (dBµV/m) | Margin AV (dBµV/m) | Carrier PK Power (dBµV/m) |
|---|---|---|---|---|---|---|---|---|---|---|
| **Vertical Radiated Emission Result** | | | | | | | | | | |
| 36.1583 | 24.3045 | - | - | 40.0000 | - | - | 15.6955 | - | - | - |
| 143.8128 | 15.7180 * | - | - | 43.5000 | - | - | 27.7820 | - | - | - |
| 156.0338 | 23.2713 * | - | - | 43.5000 | - | - | 20.2287 | - | - | - |
| 166.5497 | 14.2508 * | - | - | 43.5000 | - | - | 29.2492 | - | - | - |
| 240.0373 | 24.1913 * | - | - | 46.0000 | - | - | 21.8087 | - | - | - |
| 384.0169 | 23.9688 * | - | - | 46.0000 | - | - | 22.0312 | - | - | - |
| **Horizontal Radiated Emission Result** | | | | | | | | | | |
| 36.0000 | 17.3233 * | - | - | 40.0000 | - | - | 22.6767 | - | - | - |
| 143.9411 | 28.5112 | - | - | 43.5000 | - | - | 14.9888 | - | - | - |
| 155.9858 | 33.9368 | - | - | 43.5000 | - | - | 9.5632 | - | - | - |
| 166.7040 | 21.3749 * | - | - | 43.5000 | - | - | 22.1251 | - | - | - |
| 239.9291 | 32.0018 | - | - | 46.0000 | - | - | 13.9982 | - | - | - |
| 384.0109 | 30.0127 | - | - | 46.0000 | - | - | 15.9873 | - | - | - |

| Remarks: Pass Result | Marginal Result | Fail Result |
|---|---|---|

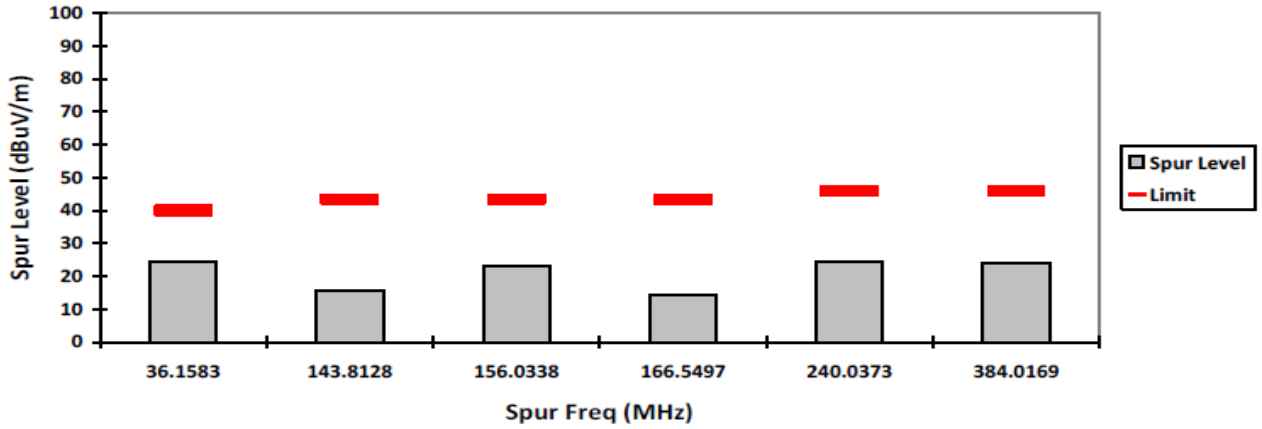
**Temperature (degC): 23.5** **Humidity (%): 70.3**

**Test Performed by: Nazrin & Qawiman** **Test Date: Wed, Jul 25, 2018**

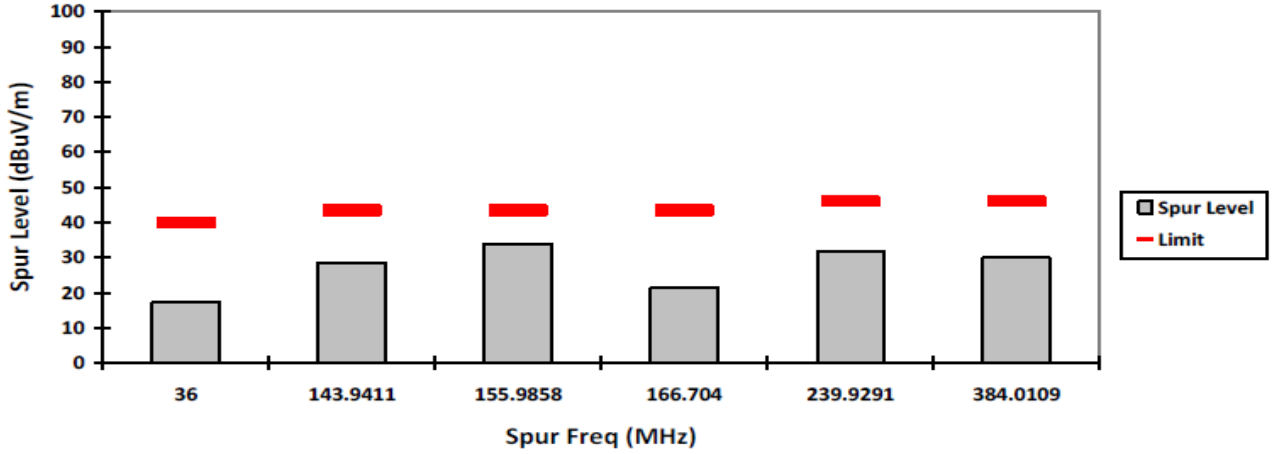
**System MU: 5.01dB**

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

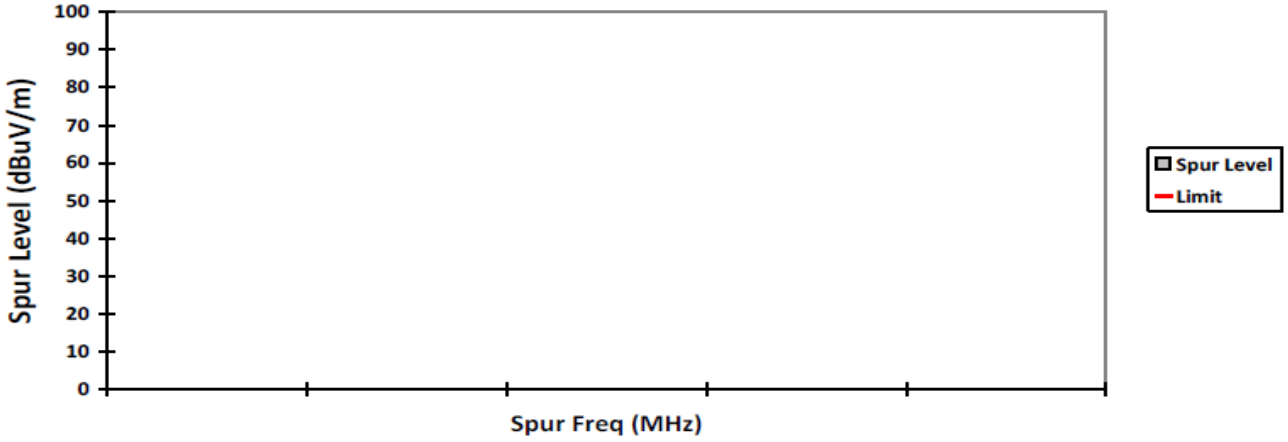
VERTICAL, QPK



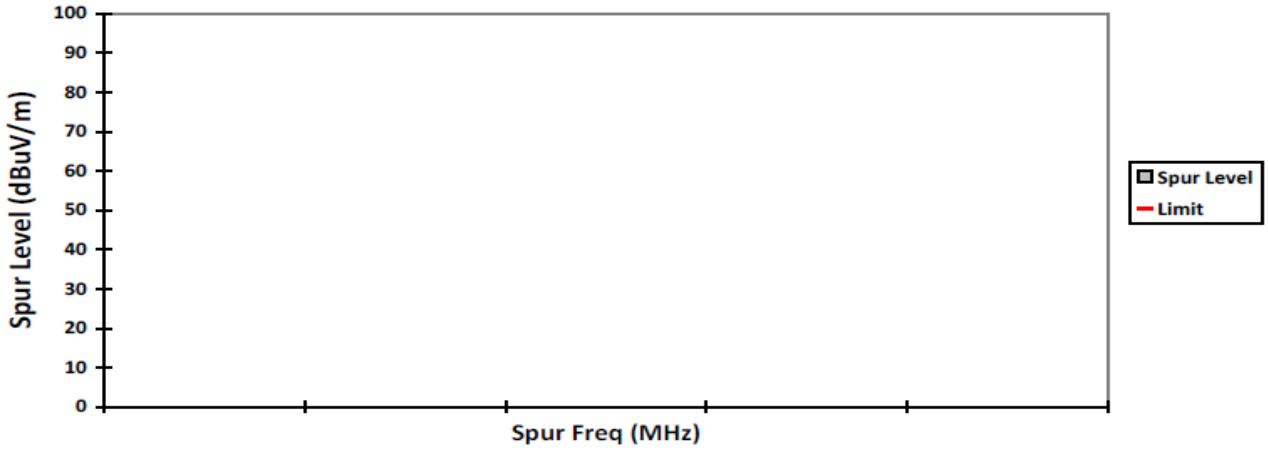

HORIZONTAL, QPK



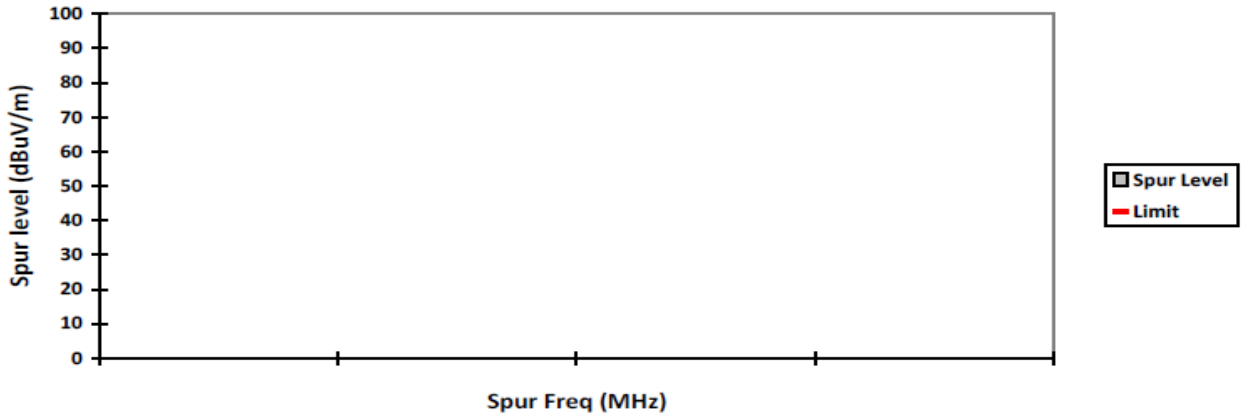

VERTICAL, PK



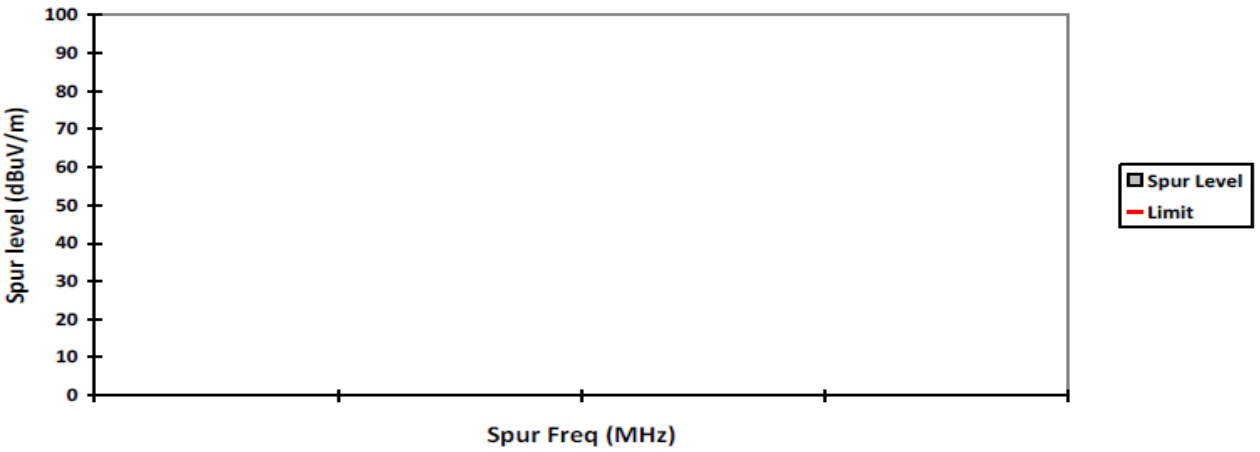
**HORIZONTAL, PK**




**VERTICAL, AV**




**HORIZONTAL, AV**



Motorola Solutions.

FCC ID: AZ492FT7089
IC ID: 109U-92FT7089

**SAC Transmitter Radiated Emission:**

**Model Number: M37TSS9PW1AN** **S/N: 681CTF3538** **SR:03466-EMC-00044**
**Battery Part No: NA** **Accy Part No: 3466-HMN4079G-3**
**Test Mode: TX Analog**
**158.550000 MHz** **25 kHz** **60.000 Watt(s) /Max Power**

| Frequency (MHz) | Limit | Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm) | Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm) |
|---|---|---|---|
| 317.1000 | -13.0000 | -92.1157 ** | -91.8192 ** |
| 475.6500 | -13.0000 | -87.2060 ** | -87.6642 ** |
| 634.2000 | -13.0000 | -86.5701 ** | -86.4900 ** |
| 792.7500 | -13.0000 | -85.7692 ** | -83.8139 ** |
| 951.3000 | -13.0000 | -83.6506 ** | -83.0904 ** |
| 1109.8500 | -13.0000 | -62.4447 ** | -62.1965 ** |
| 1268.4000 | -13.0000 | -62.0984 ** | -62.1153 ** |
| 1426.9500 | -13.0000 | -61.6806 ** | -62.1211 ** |
| 1585.5000 | -13.0000 | -60.8627 ** | -61.5687 ** |
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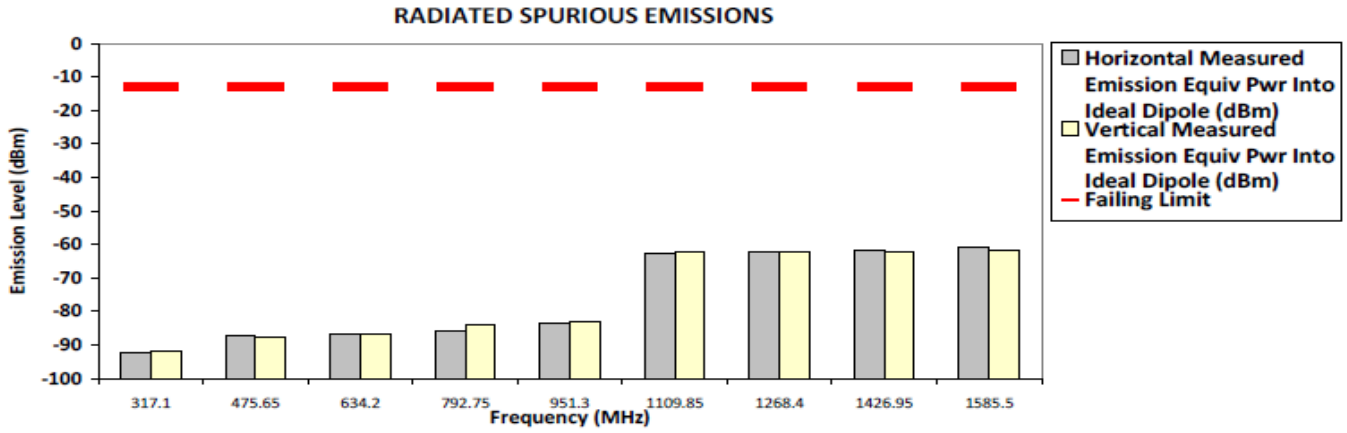


The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.
Motorola Penang EMC Lab - Test Performed by: Nazrin & Qawiman Wed, Jul 25, 2018

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
*Pursuant to CFR 47 Part 2.1057 ( c ), emissions attenuated more than 20 dB below the permissible limit are not reported
Temp(Deg): 23.5 Hum(%RH): 70.3

System MU: **5.01** dB

*Remarks:* Passed Results | Marginal Results | Failed Results

Motorola Solutions.

FCC ID: AZ492FT7089
IC ID: 109U-92FT7089

**SAC Transmitter Radiated Emission:**

**Model Number: M37TSS9PW1AN** **S/N: 681CTF3538** **SR:03466-EMC-00044**
**Battery Part No: NA** **Accy Part No: 3466-HMN4079G-3**
**Test Mode: TX APCO Digital C4FM**
**158.550000 MHz** **12.5 kHz** **60.000 Watt(s) /Max Power**

| Frequency (MHz) | Limit | Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm) | Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm) |
|---|---|---|---|
| 317.1000 | -20.0000 | -90.2303 ** | -91.7702 ** |
| 475.6500 | -20.0000 | -88.0376 ** | -87.1879 ** |
| 634.2000 | -20.0000 | -86.3047 ** | -85.4685 ** |
| 792.7500 | -20.0000 | -85.4397 ** | -84.1568 ** |
| 951.3000 | -20.0000 | -83.5261 ** | -84.7474 ** |
| 1109.8500 | -20.0000 | -61.5827 ** | -62.8835 ** |
| 1268.4000 | -20.0000 | -62.6686 ** | -62.2118 ** |
| 1426.9500 | -20.0000 | -61.5675 ** | -62.1802 ** |
| 1585.5000 | -20.0000 | -59.2573 ** | -61.0008 ** |
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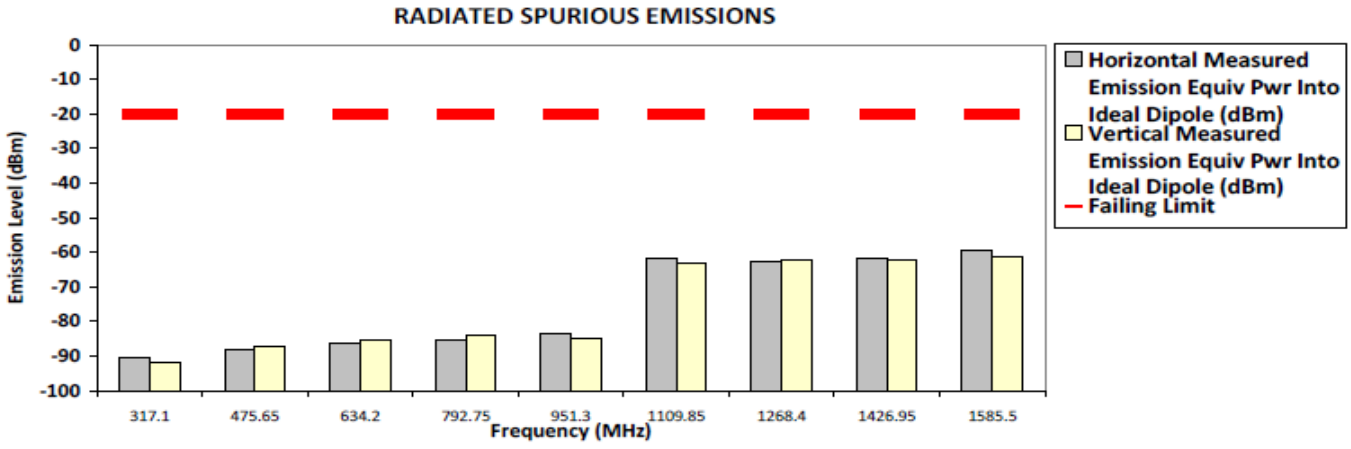


The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.
Motorola Penang EMC Lab - Test Performed by: Nazrin & Qawiman Wed, Jul 25, 2018

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
*Pursuant to CFR 47 Part 2.1057 ( c ), emissions attenuated more than 20 dB below the permissible limit are not reported
Temp(Deg): 23.5 Hum(%RH): 70.3

System MU: 5.01 dB

*Remarks:* Passed Results | Marginal Results | Failed Results

Motorola Solutions.

FCC ID: AZ492FT7089
IC ID: 109U-92FT7089

**SAC Transmitter Radiated Emission:**

**Model Number: M37TSS9PW1AN** **S/N: 681CTF3538** **SR:03466-EMC-00044**
**Battery Part No: NA** **Accy Part No: 3466-HMN4079G-3**
**Test Mode: TX APCO Digital Phase II**
**158.550000 MHz** **12.5 kHz** **60.000 Watt(s) /Max Power**

| Frequency (MHz) | Limit | Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm) | Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm) |
|---|---|---|---|
| 317.1000 | -20.0000 | -90.6482 ** | -90.8657 ** |
| 475.6500 | -20.0000 | -88.3295 ** | -87.7200 ** |
| 634.2000 | -20.0000 | -86.2168 ** | -85.8967 ** |
| 792.7500 | -20.0000 | -85.2803 ** | -85.1054 ** |
| 951.3000 | -20.0000 | -82.9906 ** | -84.3487 ** |
| 1109.8500 | -20.0000 | -62.1250 ** | -64.7019 ** |
| 1268.4000 | -20.0000 | -61.8465 ** | -62.2947 ** |
| 1426.9500 | -20.0000 | -61.9059 ** | -63.7033 ** |
| 1585.5000 | -20.0000 | -61.0143 ** | -63.9194 ** |
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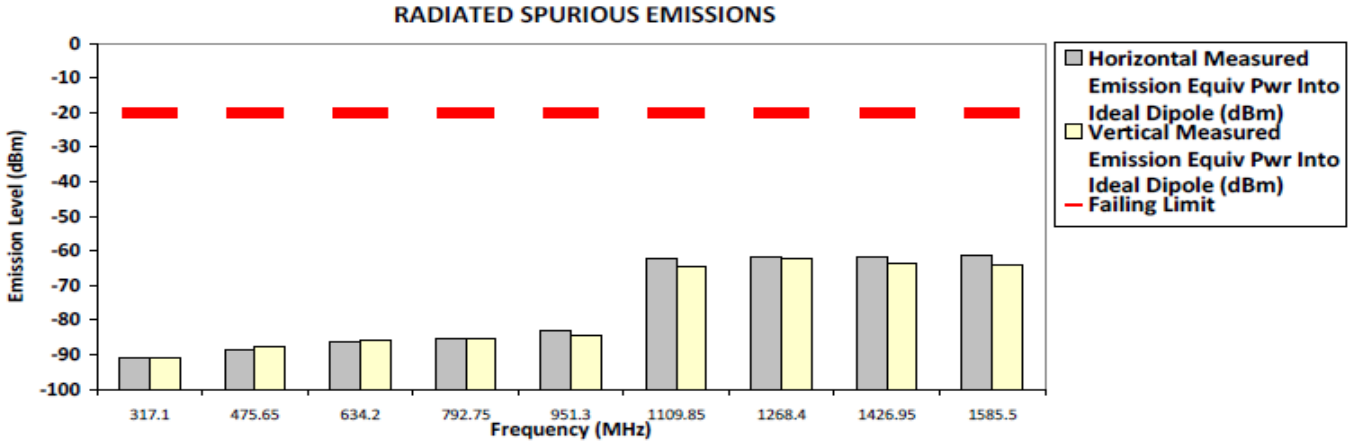


The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.
Motorola Penang EMC Lab - Test Performed by: Nazrin & Qawiman Wed, Jul 25, 2018

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
*Pursuant to CFR 47 Part 2.1057 ( c ), emissions attenuated more than 20 dB below the permissible limit are not reported
Temp(Deg): 23.5 Hum(%RH): 70.3

System MU: 5.01 dB

*Remarks:* Passed Results | Marginal Results | Failed Results

Motorola Solutions.

FCC ID: AZ492FT7089
IC ID: 109U-92FT7089

**SAC Transmitter Radiated Emission:**

**Model Number: M37TSS9PW1AN** **S/N: 681CTF3538** **SR:03466-EMC-00044**
**Battery Part No: NA** **Accy Part No: 3466-HMN4079G-3**
**Test Mode: TX Analog**
**459.125000 MHz** **25 kHz** **54.000 Watt(s) /Max Power**

| Frequency (MHz) | Limit | Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm) | Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm) |
|---|---|---|---|
| 918.2500 | -13.0000 | -82.7428 ** | -82.9276 ** |
| 1377.3750 | -13.0000 | -61.0272 ** | -62.4993 ** |
| 1836.5000 | -13.0000 | -59.8441 ** | -60.6268 ** |
| 2295.6250 | -13.0000 | -58.2957 ** | -59.1381 ** |
| 2754.7500 | -13.0000 | -55.2611 ** | -56.6673 ** |
| 3213.8750 | -13.0000 | -53.4201 ** | -54.1413 ** |
| 3673.0000 | -13.0000 | -55.1544 ** | -54.3082 ** |
| 4132.1250 | -13.0000 | -49.7066 ** | -52.1819 ** |
| 4591.2500 | -13.0000 | -49.3661 ** | -51.6414 ** |
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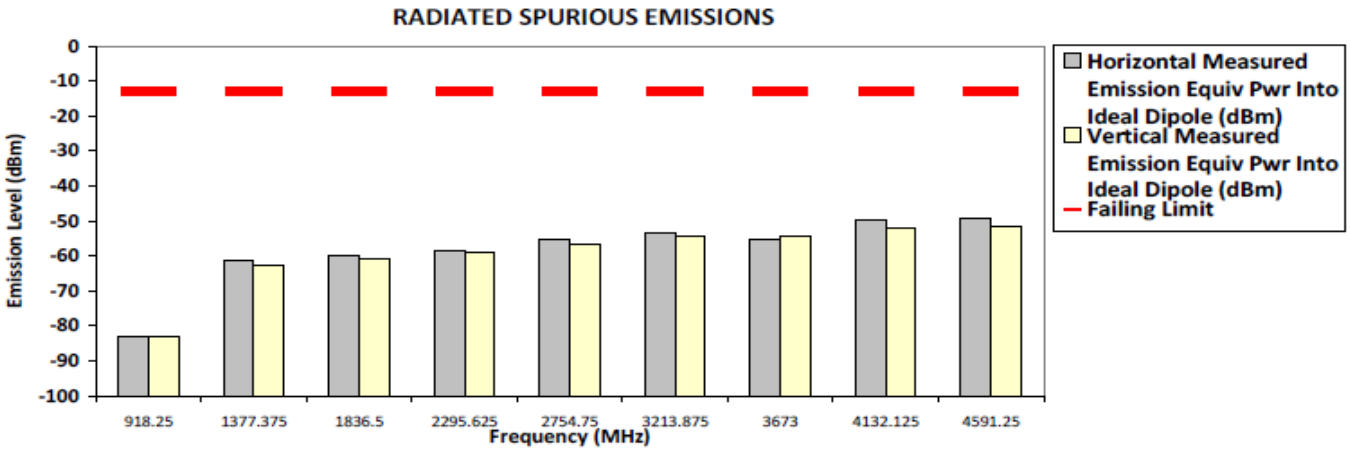


The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.
Motorola Penang EMC Lab - Test Performed by: Nazrin & Qawiman Wed, Jul 25, 2018

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
*Pursuant to CFR 47 Part 2.1057 ( c ), emissions attenuated more than 20 dB below the permissible limit are not reported
Temp(Deg): 23.5 Hum(%RH): 70.3

System MU: **5.01** dB

*Remarks:* Passed Results | Marginal Results | Failed Results

Motorola Solutions.

FCC ID: AZ492FT7089
IC ID: 109U-92FT7089

**SAC Transmitter Radiated Emission:**

**Model Number: M37TSS9PW1AN** **S/N: 681CTF3538** **SR:03466-EMC-00044**
**Battery Part No: NA** **Accy Part No: 3466-HMN4079G-3**
**Test Mode: TX APCO Digital C4FM**
**459.125000 MHz** **12.5 kHz** **54.000 Watt(s) /Max Power**

| Frequency (MHz) | Limit | Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm) | Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm) |
|---|---|---|---|
| 918.2500 | -20.0000 | -82.6434 ** | -83.8992 ** |
| 1377.3750 | -20.0000 | -61.2599 ** | -62.9739 ** |
| 1836.5000 | -20.0000 | -60.6774 ** | -61.0794 ** |
| 2295.6250 | -20.0000 | -58.2866 ** | -58.8557 ** |
| 2754.7500 | -20.0000 | -56.7809 ** | -56.8945 ** |
| 3213.8750 | -20.0000 | -54.5293 ** | -54.6544 ** |
| 3673.0000 | -20.0000 | -54.9234 ** | -54.8168 ** |
| 4132.1250 | -20.0000 | -52.4089 ** | -52.2814 ** |
| 4591.2500 | -20.0000 | -50.9447 ** | -51.4909 ** |
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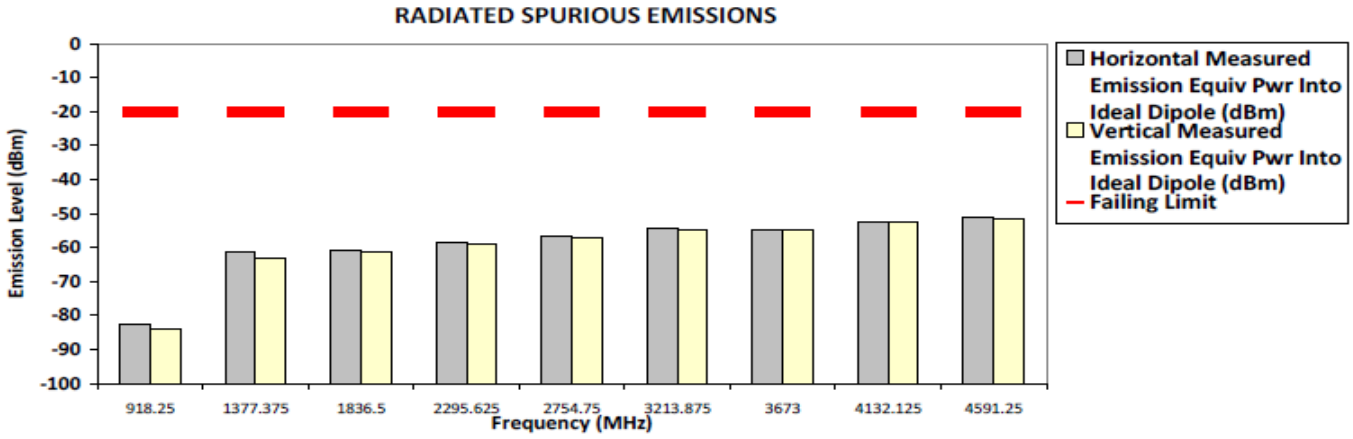


The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.
Motorola Penang EMC Lab - Test Performed by: Nazrin & Qawiman Wed, Jul 25, 2018

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
*Pursuant to CFR 47 Part 2.1057 ( c ), emissions attenuated more than 20 dB below the permissible limit are not reported
Temp(Deg): 23.5 Hum(%RH): 70.3

System MU: 5.01 dB

*Remarks:* Passed Results | Marginal Results | Failed Results

Motorola Solutions.

FCC ID: AZ492FT7089
IC ID: 109U-92FT7089

**SAC Transmitter Radiated Emission:**

**Model Number: M37TSS9PW1AN** **S/N: 681CTF3538** **SR:03466-EMC-00044**
**Battery Part No: NA** **Accy Part No: 3466-HMN4079G-3**
**Test Mode: TX APCO Digital Phase II**
**459.125000 MHz** **12.5 kHz** **54.000 Watt(s) /Max Power**

| Frequency (MHz) | Limit | Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm) | Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm) |
|---|---|---|---|
| 918.2500 | -20.0000 | -83.9812 ** | -81.8105 ** |
| 1377.3750 | -20.0000 | -56.9600 * | -37.5900 |
| 1836.5000 | -20.0000 | -61.1536 ** | -61.1887 ** |
| 2295.6250 | -20.0000 | -40.8700 * | -44.4300 * |
| 2754.7500 | -20.0000 | -46.5100 * | -43.3700 * |
| 3213.8750 | -20.0000 | -54.6911 ** | -54.4529 ** |
| 3673.0000 | -20.0000 | -55.8905 ** | -56.3711 ** |
| 4132.1250 | -20.0000 | -44.6400 * | -44.9100 * |
| 4591.2500 | -20.0000 | -51.9341 ** | -52.4019 ** |
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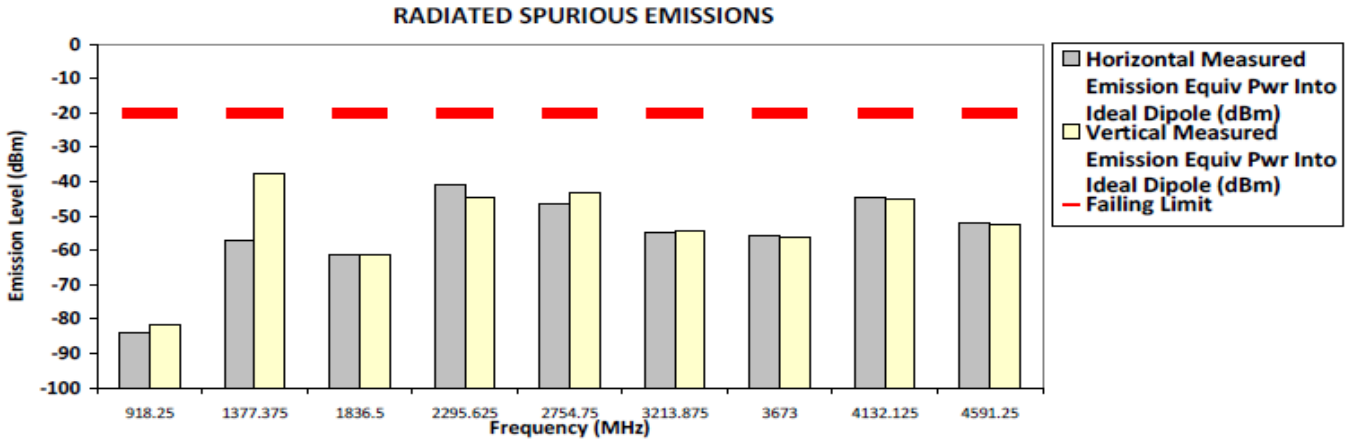


The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.
Motorola Penang EMC Lab - Test Performed by: Nazrin & Qawiman Wed, Jul 25, 2018

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
*Pursuant to CFR 47 Part 2.1057 ( c ), emissions attenuated more than 20 dB below the permissible limit are not reported
Temp(Deg): 23.5 Hum(%RH): 70.3

System MU: 5.01 dB

*Remarks:* Passed Results | Marginal Results | Failed Results

Motorola Solutions.

FCC ID: AZ492FT7089
IC ID: 109U-92FT7089

**SAC Transmitter Radiated Emission:**

**Model Number: M37TSS9PW1AN** **S/N: 681CTF3538** **SR:03466-EMC-00044**
**Battery Part No: NA** **Accy Part No: 3466-HMN4079G-3**
**Test Mode: TX Analog**
**774.887500 MHz** **12.5 kHz** **36.000 Watt(s) /Max Power**

| Frequency (MHz) | Limit | Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm) | Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm) |
|---|---|---|---|
| 1549.7750 | -13.0000 | -61.3781 ** | -61.3970 ** |
| 2324.6625 | -13.0000 | -58.6119 ** | -58.9910 ** |
| 3099.5500 | -13.0000 | -53.5611 ** | -54.5812 ** |
| 3874.4375 | -13.0000 | -52.5497 ** | -52.4537 ** |
| 4649.3250 | -13.0000 | -51.0566 ** | -50.7055 ** |
| 5424.2125 | -13.0000 | -49.5399 ** | -49.2289 ** |
| 6199.1000 | -13.0000 | -45.7218 ** | -45.7007 ** |
| 6973.9875 | -13.0000 | -44.4085 ** | -42.8919 ** |
| 7748.8750 | -13.0000 | -44.9307 ** | -45.6284 ** |
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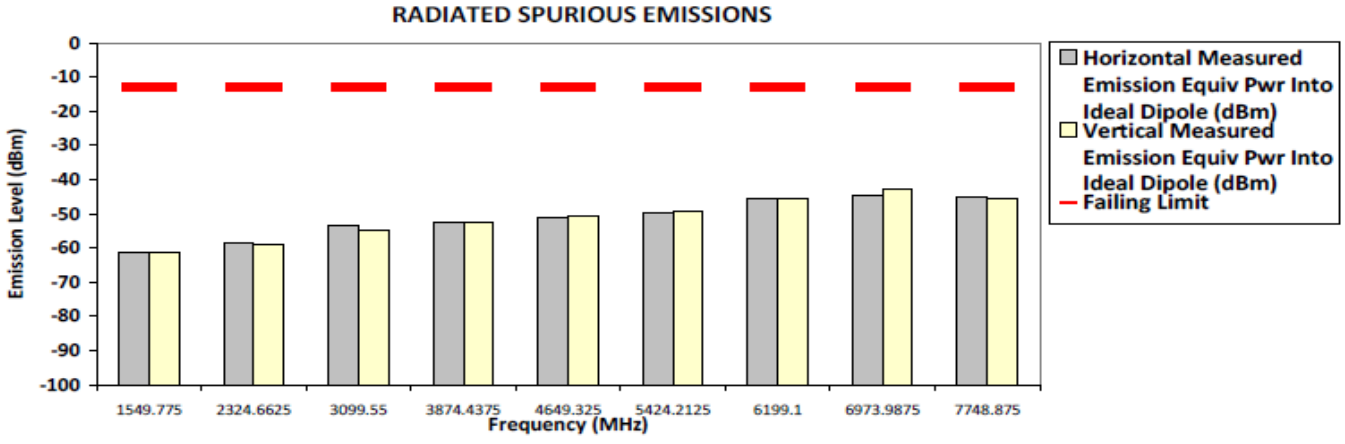


The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.
Motorola Penang EMC Lab - Test Performed by: Nazrin & Qawiman Wed, Jul 25, 2018

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
*Pursuant to CFR 47 Part 2.1057 ( c ), emissions attenuated more than 20 dB below the permissible limit are not reported
Temp(Deg): 23.5 Hum(%RH): 70.3

System MU: **5.01** dB

*Remarks:* Passed Results | Marginal Results | Failed Results

Motorola Solutions.

FCC ID: AZ492FT7089
IC ID: 109U-92FT7089

**SAC Transmitter Radiated Emission:**

**Model Number: M37TSS9PW1AN** **S/N: 681CTF3538** **SR:03466-EMC-00044**

**Battery Part No: NA** **Accy Part No: 3466-HMN4079G-3**

**Test Mode: TX APCO Digital C4FM**

**774.887500 MHz** **12.5 kHz** **36.000 Watt(s) /Max Power**

| Frequency (MHz) | Limit | Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm) | Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm) |
|---|---|---|---|
| 1549.7750 | -13.0000 | -57.0221 ** | -61.2925 ** |
| 1769.0900 | -13.0000 | -54.5300 * | -54.1800 * |
| 2324.6625 | -13.0000 | -50.5200 * | -46.2300 * |
| 3099.5500 | -13.0000 | -51.3017 ** | -56.6819 ** |
| 3874.4375 | -13.0000 | -52.9596 ** | -55.4237 ** |
| 4649.3250 | -13.0000 | -51.5530 ** | -53.2889 ** |
| 5424.2125 | -13.0000 | -48.2252 ** | -53.6432 ** |
| 6199.1000 | -13.0000 | -45.3739 ** | -47.6359 ** |
| 6973.9875 | -13.0000 | -42.7406 ** | -45.7437 ** |
| 7748.8750 | -13.0000 | -46.2288 ** | -49.2676 ** |
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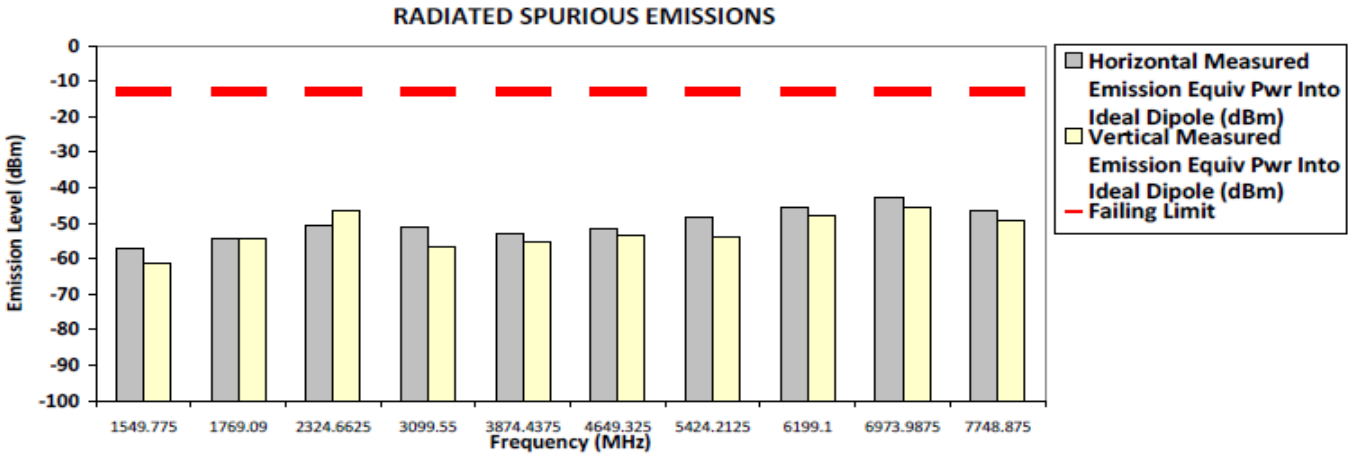


The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin & Qawiman Wed, Jul 25, 2018

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

Temp(Deg): 23.5 Hum(%RH): 70.3

System MU: **5.01** dB

*Remarks:* Passed Results | Marginal Results | Failed Results

Motorola Solutions.

FCC ID: AZ492FT7089
IC ID: 109U-92FT7089

**SAC Transmitter Radiated Emission:**

**Model Number: M37TSS9PW1AN** **S/N: 681CTF3538** **SR:03466-EMC-00044**

**Battery Part No: NA** **Accy Part No: 3466-HMN4079G-3**

**Test Mode: TX APCO Digital Phase II**

**774.887500 MHz** **12.5 kHz** **36.000 Watt(s) /Max Power**

| Frequency (MHz) | Limit | Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm) | Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm) |
|---|---|---|---|
| 1549.7750 | -13.0000 | -49.2800 * | -39.9100 * |
| 2324.6625 | -13.0000 | -50.3600 * | -41.9600 * |
| 3099.5500 | -13.0000 | -46.8200 * | -44.8700 * |
| 3874.4375 | -13.0000 | -53.0949 ** | -53.4087 ** |
| 4649.3250 | -13.0000 | -51.3116 ** | -52.0293 ** |
| 5424.2125 | -13.0000 | -49.2701 ** | -50.9228 ** |
| 6199.1000 | -13.0000 | -46.1543 ** | -47.8000 ** |
| 6973.9875 | -13.0000 | -42.8678 ** | -44.4759 ** |
| 7748.8750 | -13.0000 | -45.0185 ** | -45.9253 ** |
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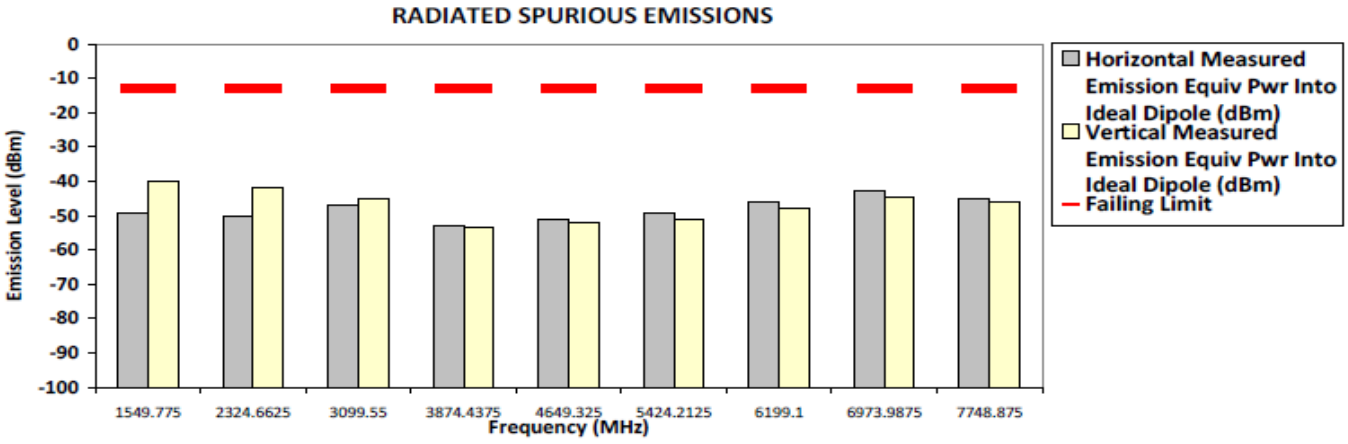


The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin & Qawiman Wed, Jul 25, 2018

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

Temp(Deg): 23.5 Hum(%RH): 70.3

System MU: **5.01** dB

*Remarks:* Passed Results | Marginal Results | Failed Results

Motorola Solutions. FCC ID: AZ492FT7089

**SAC Transmitter Radiated Emission:**

**Model Number: M37TSS9PW1AN** **S/N: 681CTF3538** **SR:03466-EMC-00044**
**Battery Part No: NA** **Accy Part No: 3466-HMN4079G-3**
**Test Mode: TX Analog**
**804.912500 MHz** **12.5 kHz** **36.000 Watt(s) /Max Power**

| Frequency (MHz) | Limit | Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm) | Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm) |
|---|---|---|---|
| 1609.8250 | -13.0000 | -51.0600 * | -51.7200 * |
| 2414.7375 | -13.0000 | -48.0800 * | -42.4100 * |
| 3219.6500 | -13.0000 | -44.1300 * | -39.8700 * |
| 4024.5625 | -13.0000 | -50.3488 ** | -51.7141 ** |
| 4829.4750 | -13.0000 | -49.2954 ** | -49.1683 ** |
| 5634.3875 | -13.0000 | -48.3648 ** | -47.1752 ** |
| 6439.3000 | -13.0000 | -46.6997 ** | -45.0346 ** |
| 7244.2125 | -13.0000 | -42.3295 ** | -43.9751 ** |
| 8049.1250 | -13.0000 | -43.6927 ** | -43.7054 ** |
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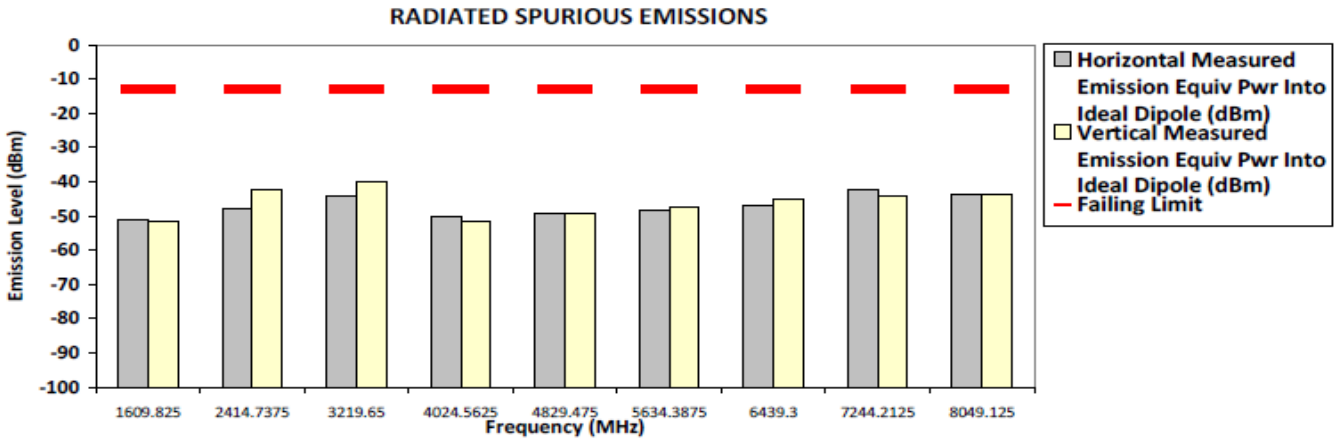


The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.
Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman Sat, Nov 10, 2018

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
*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): 70.1

System MU: **5.01** dB

*Remarks:* Passed Results | Marginal Results | Failed Results

Motorola Solutions.

FCC ID: AZ492FT7089

**SAC Transmitter Radiated Emission:**

**Model Number: M37TSS9PW1AN** **S/N: 681CTF3538** **SR:03466-EMC-00044**

**Battery Part No: NA** **Accy Part No: 3466-HMN4079G-3**

**Test Mode: TX Analog**

**814.987500 MHz** **25 kHz** **42.000 Watt(s) /Max Power**

| Frequency (MHz) | Limit | Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm) | Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm) |
|---|---|---|---|
| 1629.9750 | -13.0000 | -51.4900 * | -51.6900 * |
| 2444.9625 | -13.0000 | -45.4000 * | -37.6100 * |
| 3259.9500 | -13.0000 | -40.2600 * | -35.0900 * |
| 4074.9375 | -13.0000 | -51.5999 ** | -51.5307 ** |
| 4889.9250 | -13.0000 | -49.2207 ** | -47.7533 ** |
| 5704.9125 | -13.0000 | -48.3133 ** | -46.3573 ** |
| 6519.9000 | -13.0000 | -45.8939 ** | -44.4196 ** |
| 7334.8875 | -13.0000 | -43.7250 ** | -42.2730 ** |
| 8149.8750 | -13.0000 | -42.4522 ** | -42.9219 ** |
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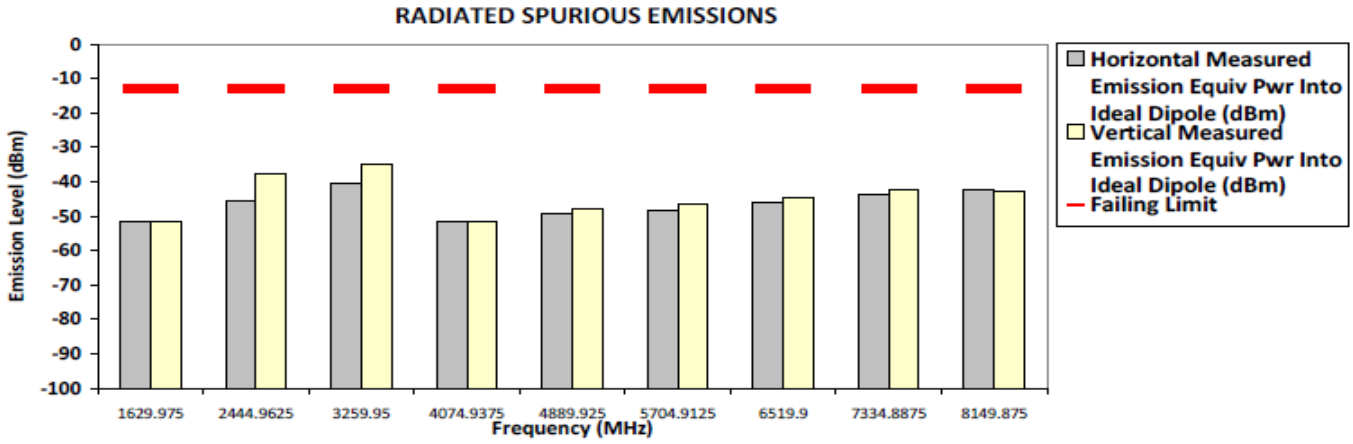


The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman Sat, Nov 10, 2018

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

*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): 70.1

System MU: **5.01** dB

*Remarks:* Passed Results | Marginal Results | Failed Results

Motorola Solutions.

FCC ID: AZ492FT7089

**SAC Transmitter Radiated Emission:**

**Model Number: M37TSS9PW1AN** **S/N: 681CTF3538** **SR:03466-EMC-00044**

**Battery Part No: NA** **Accy Part No: 3466-HMN4079G-3**

**Test Mode: TX Analog**

**851.012500 MHz** **25 kHz** **42.000 Watt(s) /Max Power**

| Frequency (MHz) | Limit | Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm) | Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm) |
|---|---|---|---|
| 1702.0250 | -13.0000 | -50.4700 * | -38.8500 * |
| 2553.0375 | -13.0000 | -45.2400 * | -37.5400 * |
| 3404.0500 | -13.0000 | -37.7000 * | -36.8100 * |
| 4255.0625 | -13.0000 | -52.3373 ** | -52.0388 ** |
| 5106.0750 | -13.0000 | -49.6560 ** | -49.4473 ** |
| 5957.0875 | -13.0000 | -47.0602 ** | -45.0360 ** |
| 6808.1000 | -13.0000 | -42.9010 ** | -44.5889 ** |
| 7659.1125 | -13.0000 | -45.5950 ** | -45.1206 ** |
| 8510.1250 | -13.0000 | -45.2657 ** | -45.1981 ** |
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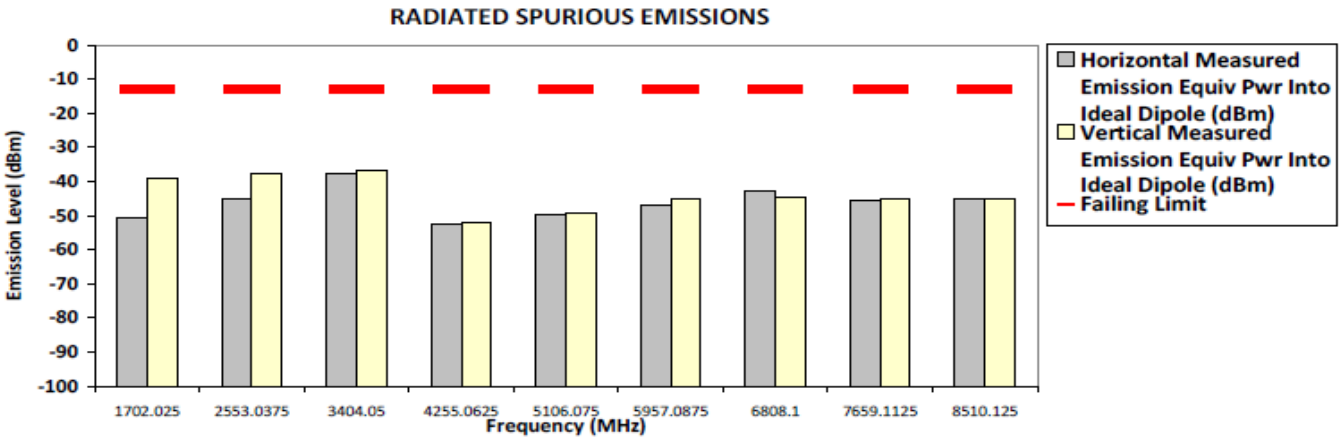


The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin & Qawiman Tue, Jul 24, 2018

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

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

Temp(Deg): 23.5 Hum(%RH): 70.3

System MU: **5.01** dB

*Remarks:*

| Passed Results | Marginal Results | Failed Results |
|---|---|---|

Motorola Solutions.

FCC ID: AZ492FT7089

**SAC Transmitter Radiated Emission:**

**Model Number: M37TSS9PW1AN** **S/N: 681CTF3538** **SR:03466-EMC-00044**

**Battery Part No: NA** **Accy Part No: 3466-HMN4079G-3**

**Test Mode: TX APCO Digital C4FM**

**804.912500 MHz** **12.5 kHz** **36.000 Watt(s) /Max Power**

| Frequency (MHz) | Limit | Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm) | Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm) |
|---|---|---|---|
| 1609.8250 | -13.0000 | -53.1900 * | -51.3800 * |
| 2414.7375 | -13.0000 | -47.9700 * | -42.4000 * |
| 3219.6500 | -13.0000 | -44.5500 * | -39.9100 * |
| 4024.5625 | -13.0000 | -51.1792 ** | -52.0555 ** |
| 4829.4750 | -13.0000 | -49.8300 ** | -48.4926 ** |
| 5634.3875 | -13.0000 | -48.4005 ** | -48.0526 ** |
| 6439.3000 | -13.0000 | -46.4418 ** | -46.8711 ** |
| 7244.2125 | -13.0000 | -44.0862 ** | -43.8693 ** |
| 8049.1250 | -13.0000 | -43.1466 ** | -43.0892 ** |
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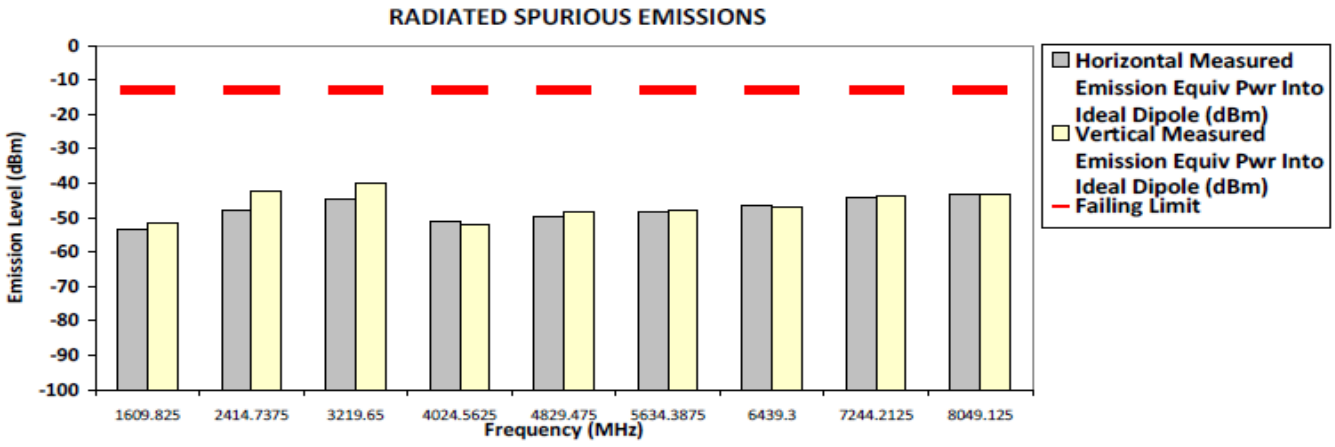


The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman Sat, Nov 10, 2018

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

*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): 70.1

System MU: **5.01** dB

*Remarks:* Passed Results | Marginal Results | Failed Results

Motorola Solutions.

FCC ID: AZ492FT7089

**SAC Transmitter Radiated Emission:**

**Model Number: M37TSS9PW1AN** **S/N: 681CTF3538** **SR:03466-EMC-00044**

**Battery Part No: NA** **Accy Part No: 3466-HMN4079G-3**

**Test Mode: TX APCO Digital C4FM**

**814.987500 MHz** **12.5 kHz** **42.000 Watt(s) /Max Power**

| Frequency (MHz) | Limit | Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm) | Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm) |
|---|---|---|---|
| 1629.9750 | -13.0000 | -53.0000 * | -53.6100 * |
| 2444.9625 | -13.0000 | -48.3500 * | -41.7400 * |
| 3259.9500 | -13.0000 | -44.1900 * | -38.8200 * |
| 4074.9375 | -13.0000 | -52.1632 ** | -51.6275 ** |
| 4889.9250 | -13.0000 | -48.9670 ** | -49.7447 ** |
| 5704.9125 | -13.0000 | -47.6071 ** | -48.1141 ** |
| 6519.9000 | -13.0000 | -45.5504 ** | -44.9449 ** |
| 7334.8875 | -13.0000 | -43.7835 ** | -42.6262 ** |
| 8149.8750 | -13.0000 | -42.8310 ** | -42.4712 ** |
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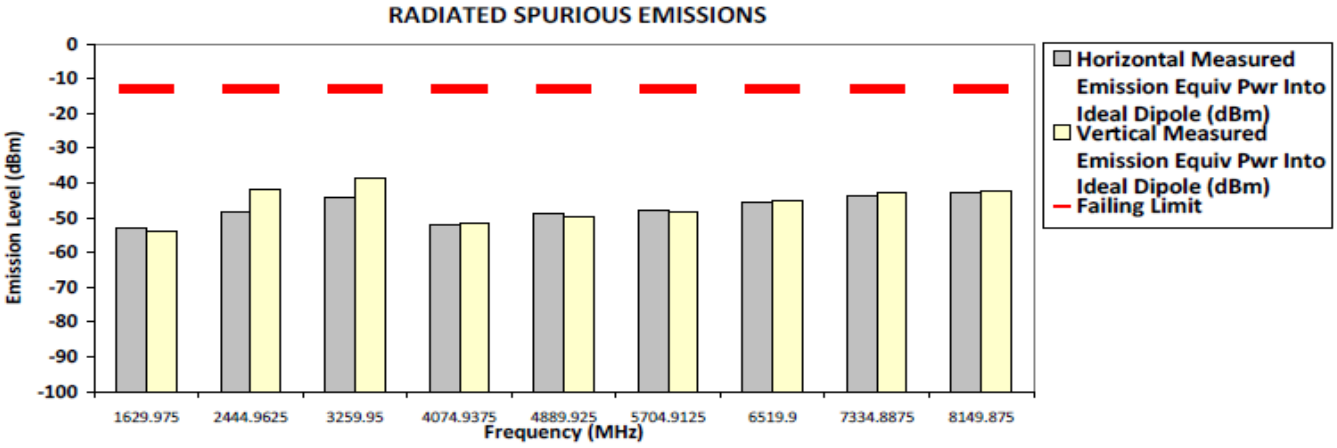


The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman Sun, Nov 11, 2018

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

*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): 70.1

System MU: 5.01 dB

*Remarks:* Passed Results | Marginal Results | Failed Results

Motorola Solutions.

FCC ID: AZ492FT7089

**SAC Transmitter Radiated Emission:**

**Model Number: M37TSS9PW1AN** **S/N: 681CTF3538** **SR:03466-EMC-00044**

**Battery Part No: NA** **Accy Part No: 3466-HMN4079G-3**

**Test Mode: TX APCO Digital C4FM**

**851.012500 MHz** **12.5 kHz** **42.000 Watt(s) /Max Power**

| Frequency (MHz) | Limit | Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm) | Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm) |
|---|---|---|---|
| 1702.0250 | -13.0000 | -48.0500 * | -56.3500 * |
| 2553.0375 | -13.0000 | -39.0600 * | -49.3400 * |
| 3404.0500 | -13.0000 | -39.6500 * | -47.6900 * |
| 4255.0625 | -13.0000 | -52.2708 ** | -52.3005 ** |
| 5106.0750 | -13.0000 | -48.3672 ** | -48.6964 ** |
| 5957.0875 | -13.0000 | -46.3195 ** | -46.3446 ** |
| 6808.1000 | -13.0000 | -42.1348 ** | -44.5655 ** |
| 7659.1125 | -13.0000 | -45.6119 ** | -45.3541 ** |
| 8510.1250 | -13.0000 | -45.8122 ** | -45.5977 ** |
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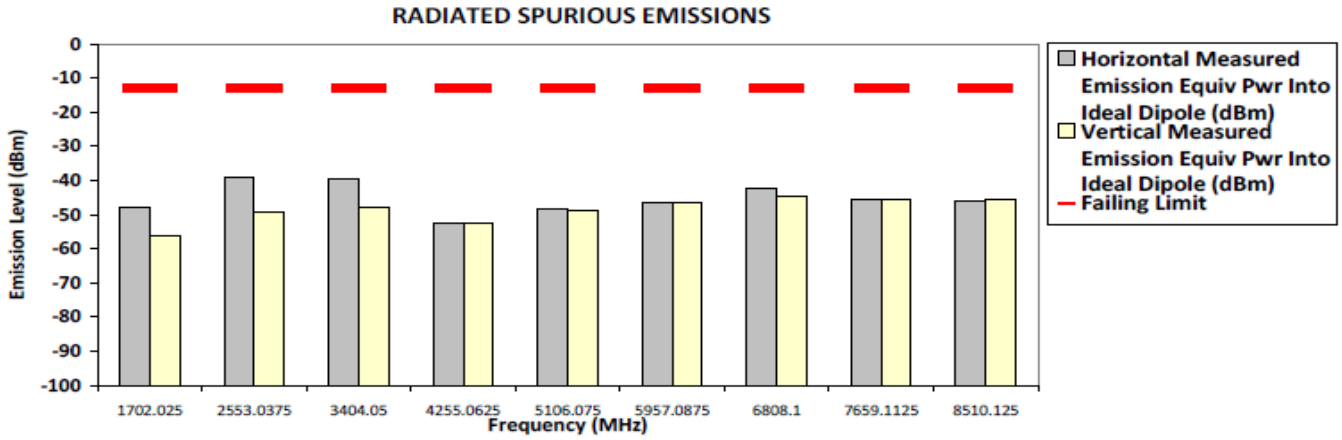


The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin & Qawiman Tue, Jul 24, 2018

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

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

Temp(Deg): 23.5 Hum(%RH): 70.3

System MU: 5.01 dB

*Remarks:* Passed Results | Marginal Results | Failed Results

Motorola Solutions.

FCC ID: AZ492FT7089

**SAC Transmitter Radiated Emission:**

**Model Number: M37TSS9PW1AN** **S/N: 681CTF3538** **SR:03466-EMC-00044**

**Battery Part No: NA** **Accy Part No: 3466-HMN4079G-3**

**Test Mode: TX APCO Digital Phase II**

**804.912500 MHz** **12.5 kHz** **36.000 Watt(s) /Max Power**

| Frequency (MHz) | Limit | Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm) | Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm) |
|---|---|---|---|
| 1609.8250 | -13.0000 | -51.4200 * | -51.1100 * |
| 2414.7375 | -13.0000 | -47.6000 * | -41.4000 * |
| 3219.6500 | -13.0000 | -43.7300 * | -40.5700 * |
| 4024.5625 | -13.0000 | -51.8262 ** | -52.6880 ** |
| 4829.4750 | -13.0000 | -49.9108 ** | -48.6256 ** |
| 5634.3875 | -13.0000 | -48.2682 ** | -48.8425 ** |
| 6439.3000 | -13.0000 | -45.5317 ** | -47.1150 ** |
| 7244.2125 | -13.0000 | -43.5574 ** | -43.9422 ** |
| 8049.1250 | -13.0000 | -43.1300 ** | -41.8470 ** |
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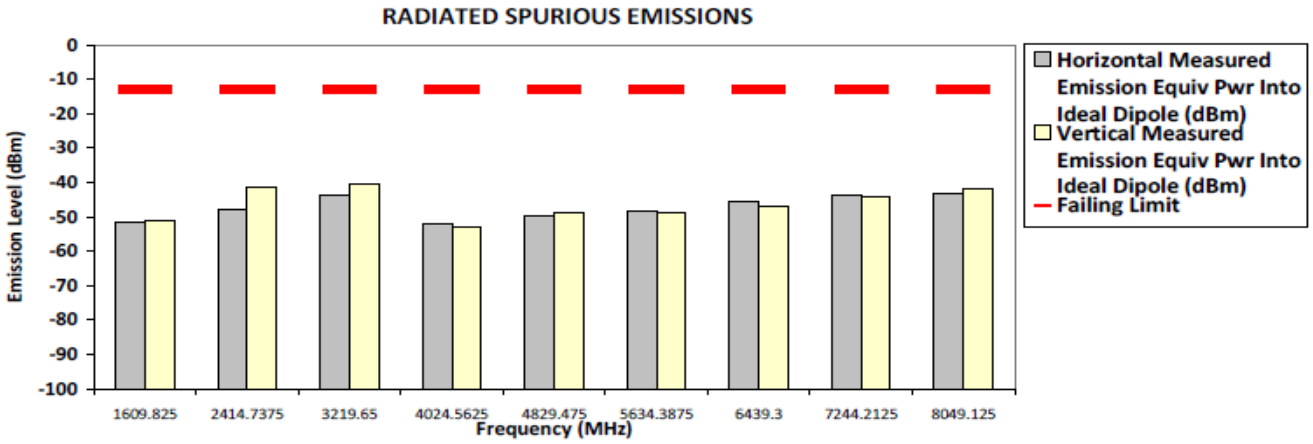


The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman Sat, Nov 10, 2018

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

*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): 70.1

System MU: 5.01 dB

*Remarks:* Passed Results | Marginal Results | Failed Results

Motorola Solutions. FCC ID: AZ492FT7089

**SAC Transmitter Radiated Emission:**

**Model Number: M37TSS9PW1AN** **S/N: 681CTF3538** **SR:03466-EMC-00044**
**Battery Part No: NA** **Accy Part No: 3466-HMN4079G-3**
**Test Mode: TX APCO Digital Phase II**
**814.987500 MHz** **12.5 kHz** **42.000 Watt(s) /Max Power**

| Frequency (MHz) | Limit | Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm) | Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm) |
|---|---|---|---|
| 1629.9750 | -13.0000 | -52.2100 * | -51.4400 * |
| 2444.9625 | -13.0000 | -44.9400 * | -37.6100 * |
| 3259.9500 | -13.0000 | -40.6800 * | -33.9000 * |
| 4074.9375 | -13.0000 | -50.7828 ** | -51.4610 ** |
| 4889.9250 | -13.0000 | -48.5812 ** | -49.0924 ** |
| 5704.9125 | -13.0000 | -48.4221 ** | -46.9632 ** |
| 6519.9000 | -13.0000 | -45.5657 ** | -44.4122 ** |
| 7334.8875 | -13.0000 | -43.7235 ** | -43.5475 ** |
| 8149.8750 | -13.0000 | -43.0707 ** | -42.9144 ** |
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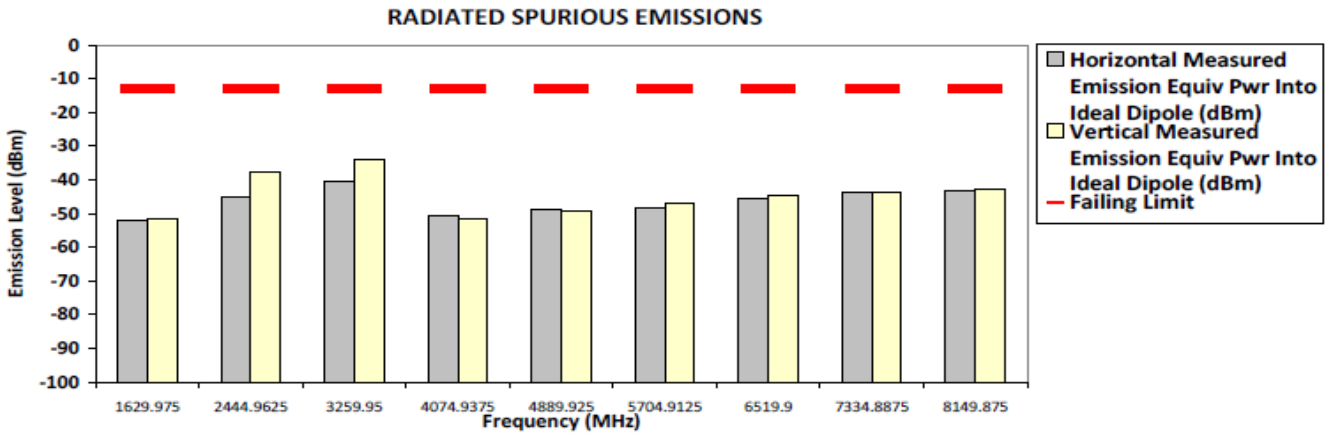


The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.
Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman Sun, Nov 11, 2018

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
*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): 70.1

System MU: 5.01 dB

*Remarks:* Passed Results | Marginal Results | Failed Results

Motorola Solutions.

FCC ID: AZ492FT7089

**SAC Transmitter Radiated Emission:**

**Model Number: M37TSS9PW1AN** **S/N: 681CTF3538** **SR:03466-EMC-00044**

**Battery Part No: NA** **Accy Part No: 3466-HMN4079G-3**

**Test Mode: TX APCO Digital Phase II**

**851.012500 MHz** **12.5 kHz** **42.000 Watt(s) /Max Power**

| Frequency (MHz) | Limit | Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm) | Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm) |
|---|---|---|---|
| 1702.0250 | -13.0000 | -50.1200 * | -50.6200 * |
| 2553.0375 | -13.0000 | -38.9900 * | -34.5300 * |
| 3404.0500 | -13.0000 | -37.5500 * | -36.8400 * |
| 4255.0625 | -13.0000 | -52.4878 ** | -52.3377 ** |
| 5106.0750 | -13.0000 | -48.3890 ** | -49.7194 ** |
| 5957.0875 | -13.0000 | -46.2615 ** | -45.3960 ** |
| 6808.1000 | -13.0000 | -43.8820 ** | -44.3459 ** |
| 7659.1125 | -13.0000 | -45.5332 ** | -45.1386 ** |
| 8510.1250 | -13.0000 | -45.1965 ** | -44.4382 ** |
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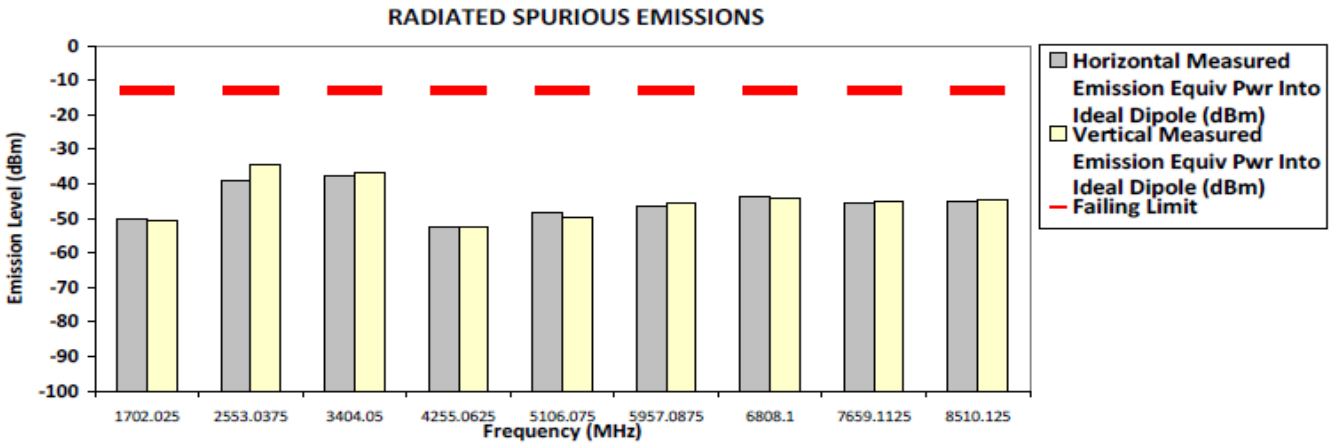


The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin & Qawiman Tue, Jul 24, 2018

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

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

Temp(Deg): 23.5 Hum(%RH): 70.3

System MU: 5.01 dB

*Remarks:* Passed Results | Marginal Results | Failed Results

Motorola Solutions.

IC ID: 109U-92FT7089

**SAC Transmitter Radiated Emission:**

**Model Number: M37TSS9PW1AN** **S/N: 681CTF3538** **SR:03466-EMC-00044**

**Battery Part No: NA** **Accy Part No: 3466-HMN4079G-3**

**Test Mode: TX Analog**

**804.912500 MHz** **12.5 kHz** **36.000 Watt(s) /Max Power**

| Frequency (MHz) | Limit | Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm) | Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm) |
|---|---|---|---|
| 1609.8250 | -20.0000 | -51.0600 * | -51.7200 * |
| 2414.7375 | -20.0000 | -48.0800 * | -42.4100 * |
| 3219.6500 | -20.0000 | -44.1300 * | -39.8700 * |
| 4024.5625 | -20.0000 | -50.3488 ** | -51.7141 ** |
| 4829.4750 | -20.0000 | -49.2954 ** | -49.1683 ** |
| 5634.3875 | -20.0000 | -48.3648 ** | -47.1752 ** |
| 6439.3000 | -20.0000 | -46.6997 ** | -45.0346 ** |
| 7244.2125 | -20.0000 | -42.3295 ** | -43.9751 ** |
| 8049.1250 | -20.0000 | -43.6927 ** | -43.7054 ** |
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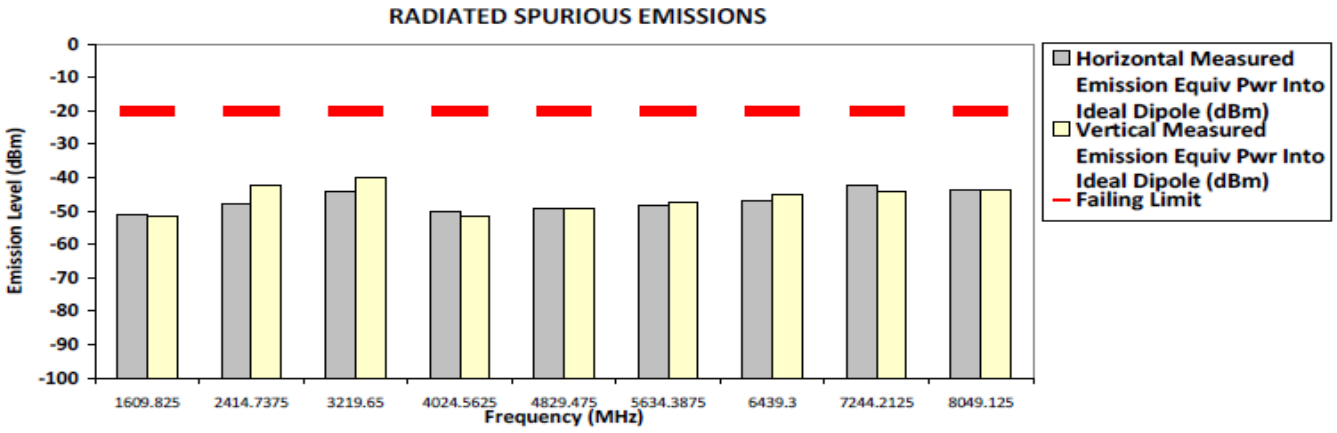


The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman Sat, Nov 10, 2018

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

*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): 70.1

System MU: **5.01** dB

*Remarks:* Passed Results | Marginal Results | Failed Results

Motorola Solutions.

IC ID: 109U-92FT7089

**SAC Transmitter Radiated Emission:**

**Model Number: M37TSS9PW1AN** **S/N: 681CTF3538** **SR:03466-EMC-00044**

**Battery Part No: NA** **Accy Part No: 3466-HMN4079G-3**

**Test Mode: TX Analog**

**814.987500 MHz** **25 kHz** **42.000 Watt(s) /Max Power**

| Frequency (MHz) | Limit | Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm) | Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm) |
|---|---|---|---|
| 1629.9750 | -13.0000 | -51.4900 * | -51.6900 * |
| 2444.9625 | -13.0000 | -45.4000 * | -37.6100 * |
| 3259.9500 | -13.0000 | -40.2600 * | -35.0900 * |
| 4074.9375 | -13.0000 | -51.5999 ** | -51.5307 ** |
| 4889.9250 | -13.0000 | -49.2207 ** | -47.7533 ** |
| 5704.9125 | -13.0000 | -48.3133 ** | -46.3573 ** |
| 6519.9000 | -13.0000 | -45.8939 ** | -44.4196 ** |
| 7334.8875 | -13.0000 | -43.7250 ** | -42.2730 ** |
| 8149.8750 | -13.0000 | -42.4522 ** | -42.9219 ** |
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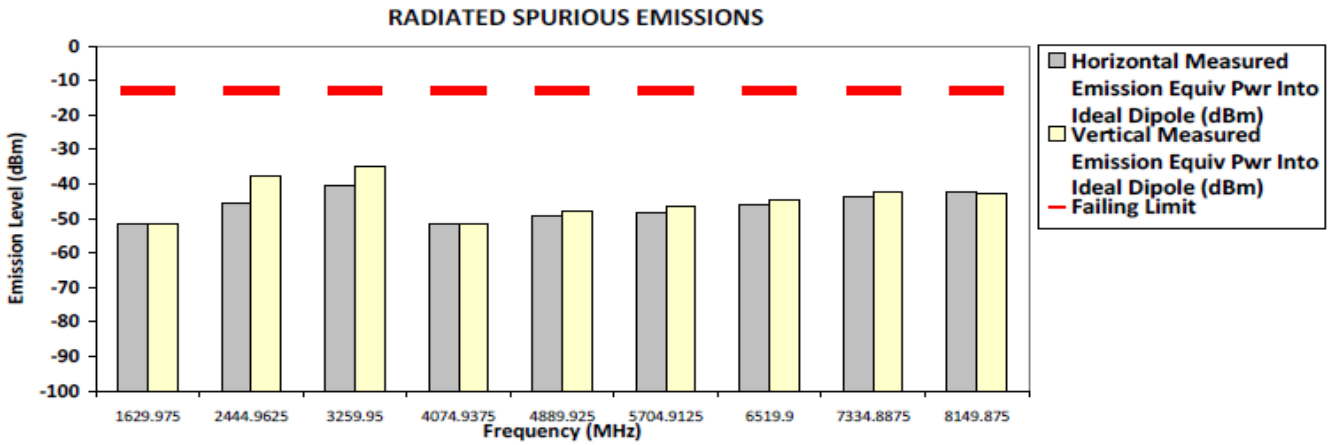


The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman Sat, Nov 10, 2018

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

*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): 70.1

System MU: 5.01 dB

*Remarks:* Passed Results | Marginal Results | Failed Results

**SAC Transmitter Radiated Emission:**

**Model Number: M37TSS9PW1AN** **S/N: 681CTF3538** **SR:03466-EMC-00044**

**Battery Part No: NA** **Accy Part No: 3466-HMN4079G-3**

**Test Mode: TX Analog**

**851.012500 MHz** **25 kHz** **42.000 Watt(s) /Max Power**

| Frequency (MHz) | Limit | Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm) | Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm) |
|---|---|---|---|
| 1702.0250 | -13.0000 | -50.4700 * | -38.8500 * |
| 2553.0375 | -13.0000 | -45.2400 * | -37.5400 * |
| 3404.0500 | -13.0000 | -37.7000 * | -36.8100 * |
| 4255.0625 | -13.0000 | -52.3373 ** | -52.0388 ** |
| 5106.0750 | -13.0000 | -49.6560 ** | -49.4473 ** |
| 5957.0875 | -13.0000 | -47.0602 ** | -45.0360 ** |
| 6808.1000 | -13.0000 | -42.9010 ** | -44.5889 ** |
| 7659.1125 | -13.0000 | -45.5950 ** | -45.1206 ** |
| 8510.1250 | -13.0000 | -45.2657 ** | -45.1981 ** |
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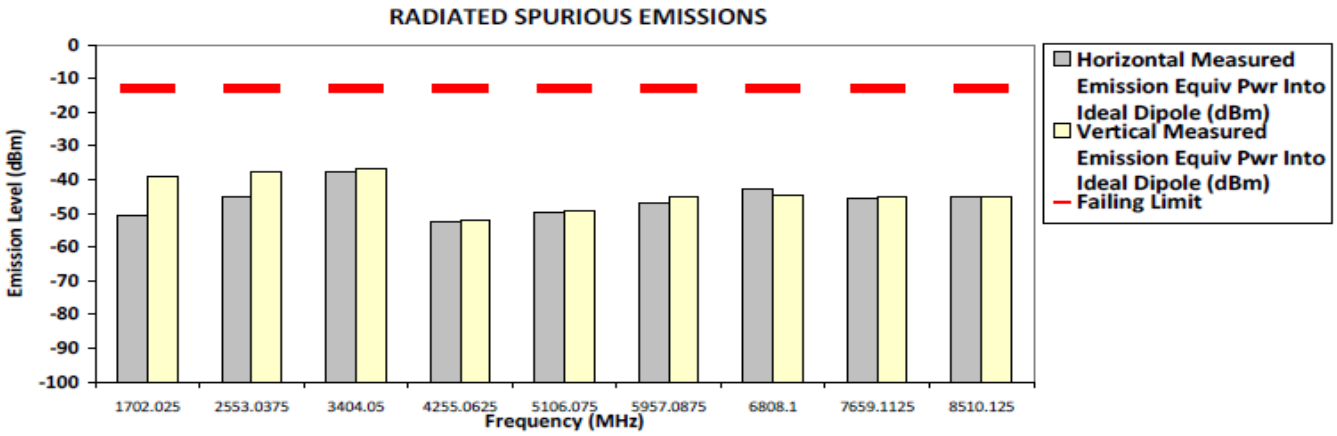


The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin & Qawiman Tue, Jul 24, 2018

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

Temp(Deg): 23.5 Hum(%RH): 70.3

System MU: 5.01 dB

*Remarks:* Passed Results | Marginal Results | Failed Results

Motorola Solutions.

IC ID: 109U-92FT7089

**SAC Transmitter Radiated Emission:**

**Model Number: M37TSS9PW1AN** **S/N: 681CTF3538** **SR:03466-EMC-00044**

**Battery Part No: NA** **Accy Part No: 3466-HMN4079G-3**

**Test Mode: TX APCO Digital C4FM**

**804.912500 MHz** **12.5 kHz** **36.000 Watt(s) /Max Power**

| Frequency (MHz) | Limit | Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm) | Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm) |
|---|---|---|---|
| 1609.8250 | -20.0000 | -53.1900 * | -51.3800 * |
| 2414.7375 | -20.0000 | -47.9700 * | -42.4000 * |
| 3219.6500 | -20.0000 | -44.5500 * | -39.9100 * |
| 4024.5625 | -20.0000 | -51.1792 ** | -52.0555 ** |
| 4829.4750 | -20.0000 | -49.8300 ** | -48.4926 ** |
| 5634.3875 | -20.0000 | -48.4005 ** | -48.0526 ** |
| 6439.3000 | -20.0000 | -46.4418 ** | -46.8711 ** |
| 7244.2125 | -20.0000 | -44.0862 ** | -43.8693 ** |
| 8049.1250 | -20.0000 | -43.1466 ** | -43.0892 ** |
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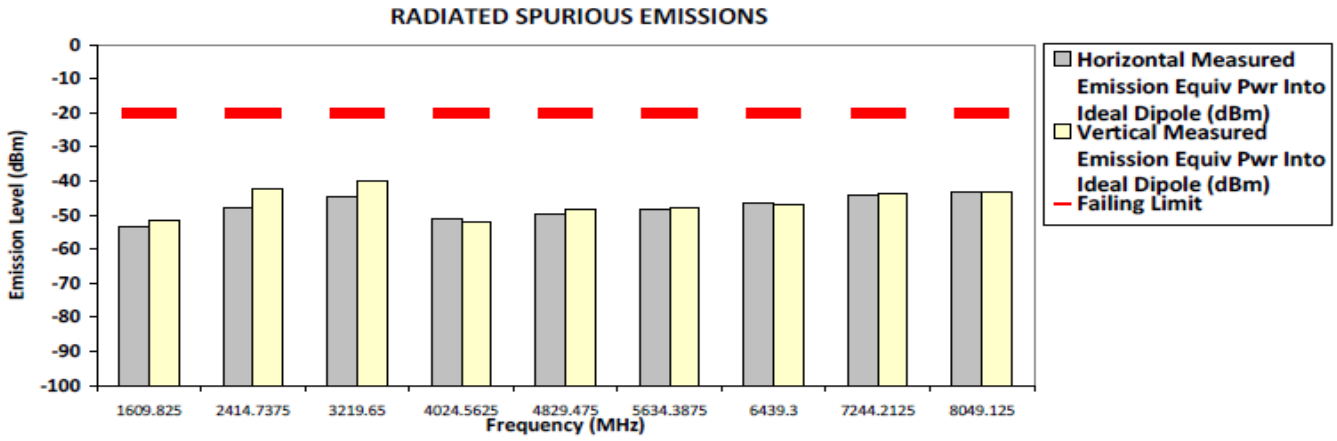


The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman Sat, Nov 10, 2018

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

*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): 70.1

System MU: 5.01 dB

*Remarks:* Passed Results | Marginal Results | Failed Results

**SAC Transmitter Radiated Emission:**

**Model Number: M37TSS9PW1AN** **S/N: 681CTF3538** **SR:03466-EMC-00044**

**Battery Part No: NA** **Accy Part No: 3466-HMN4079G-3**

**Test Mode: TX APCO Digital C4FM**

**814.987500 MHz** **12.5 kHz** **42.000 Watt(s) /Max Power**

| Frequency (MHz) | Limit | Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm) | Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm) |
|---|---|---|---|
| 1629.9750 | -20.0000 | -53.0000 * | -53.6100 * |
| 2444.9625 | -20.0000 | -48.3500 * | -41.7400 * |
| 3259.9500 | -20.0000 | -44.1900 * | -38.8200 * |
| 4074.9375 | -20.0000 | -52.1632 ** | -51.6275 ** |
| 4889.9250 | -20.0000 | -48.9670 ** | -49.7447 ** |
| 5704.9125 | -20.0000 | -47.6071 ** | -48.1141 ** |
| 6519.9000 | -20.0000 | -45.5504 ** | -44.9449 ** |
| 7334.8875 | -20.0000 | -43.7835 ** | -42.6262 ** |
| 8149.8750 | -20.0000 | -42.8310 ** | -42.4712 ** |
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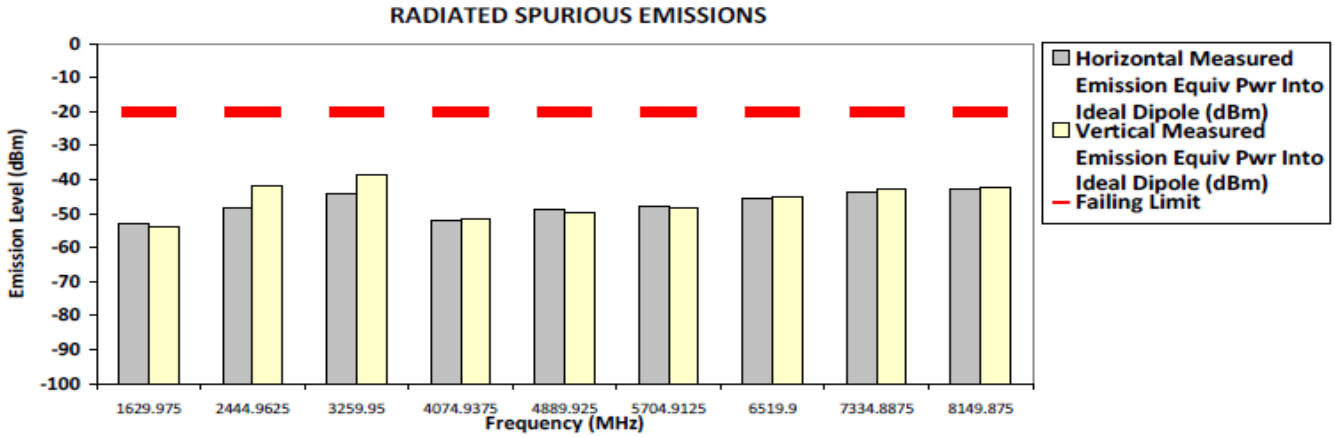


The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman Sun, Nov 11, 2018

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

*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): 70.1

System MU: **5.01** dB

*Remarks:*

| Passed Results | Marginal Results | Failed Results |
|---|---|---|

Motorola Solutions.

IC ID: 109U-92FT7089

**SAC Transmitter Radiated Emission:**

**Model Number: M37TSS9PW1AN** **S/N: 681CTF3538** **SR:03466-EMC-00044**

**Battery Part No: NA** **Accy Part No: 3466-HMN4079G-3**

**Test Mode: TX APCO Digital C4FM**

**851.012500 MHz** **12.5 kHz** **42.000 Watt(s) /Max Power**

| Frequency (MHz) | Limit | Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm) | Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm) |
|---|---|---|---|
| 1702.0250 | -20.0000 | -48.0500 * | -56.3500 * |
| 2553.0375 | -20.0000 | -39.0600 * | -49.3400 * |
| 3404.0500 | -20.0000 | -39.6500 * | -47.6900 * |
| 4255.0625 | -20.0000 | -52.2708 ** | -52.3005 ** |
| 5106.0750 | -20.0000 | -48.3672 ** | -48.6964 ** |
| 5957.0875 | -20.0000 | -46.3195 ** | -46.3446 ** |
| 6808.1000 | -20.0000 | -42.1348 ** | -44.5655 ** |
| 7659.1125 | -20.0000 | -45.6119 ** | -45.3541 ** |
| 8510.1250 | -20.0000 | -45.8122 ** | -45.5977 ** |
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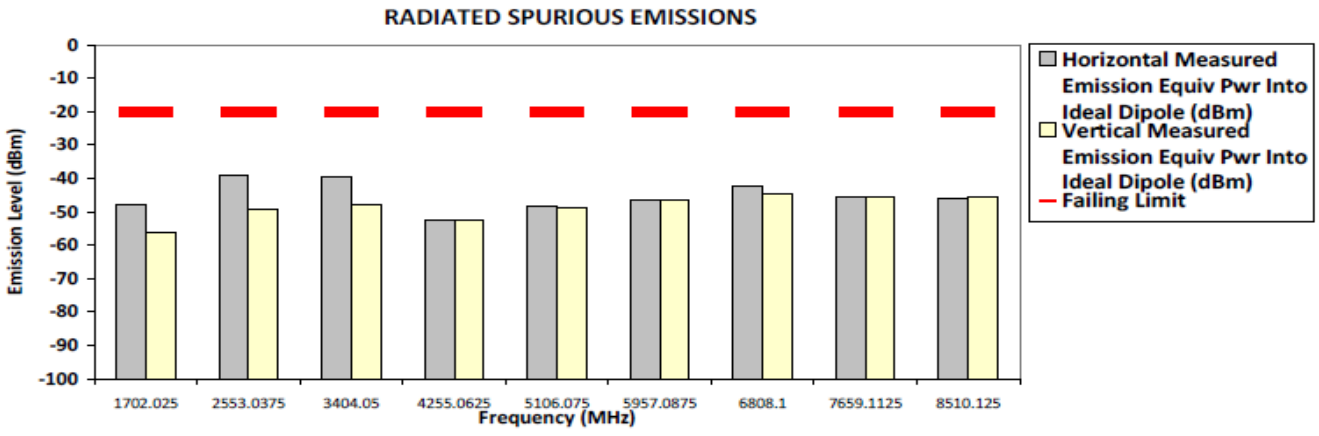


The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin & Qawiman Tue, Jul 24, 2018

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

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

Temp(Deg): 23.5 Hum(%RH): 70.3

System MU: 5.01 dB

*Remarks:* Passed Results | Marginal Results | Failed Results

Motorola Solutions.

IC ID: 109U-92FT7089

**SAC Transmitter Radiated Emission:**

**Model Number: M37TSS9PW1AN** **S/N: 681CTF3538** **SR:03466-EMC-00044**

**Battery Part No: NA** **Accy Part No: 3466-HMN4079G-3**

**Test Mode: TX APCO Digital Phase II**

**804.912500 MHz** **12.5 kHz** **36.000 Watt(s) /Max Power**

| Frequency (MHz) | Limit | Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm) | Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm) |
|---|---|---|---|
| 1609.8250 | -20.0000 | -51.4200 * | -51.1100 * |
| 2414.7375 | -20.0000 | -47.6000 * | -41.4000 * |
| 3219.6500 | -20.0000 | -43.7300 * | -40.5700 * |
| 4024.5625 | -20.0000 | -51.8262 ** | -52.6880 ** |
| 4829.4750 | -20.0000 | -49.9108 ** | -48.6256 ** |
| 5634.3875 | -20.0000 | -48.2682 ** | -48.8425 ** |
| 6439.3000 | -20.0000 | -45.5317 ** | -47.1150 ** |
| 7244.2125 | -20.0000 | -43.5574 ** | -43.9422 ** |
| 8049.1250 | -20.0000 | -43.1300 ** | -41.8470 ** |
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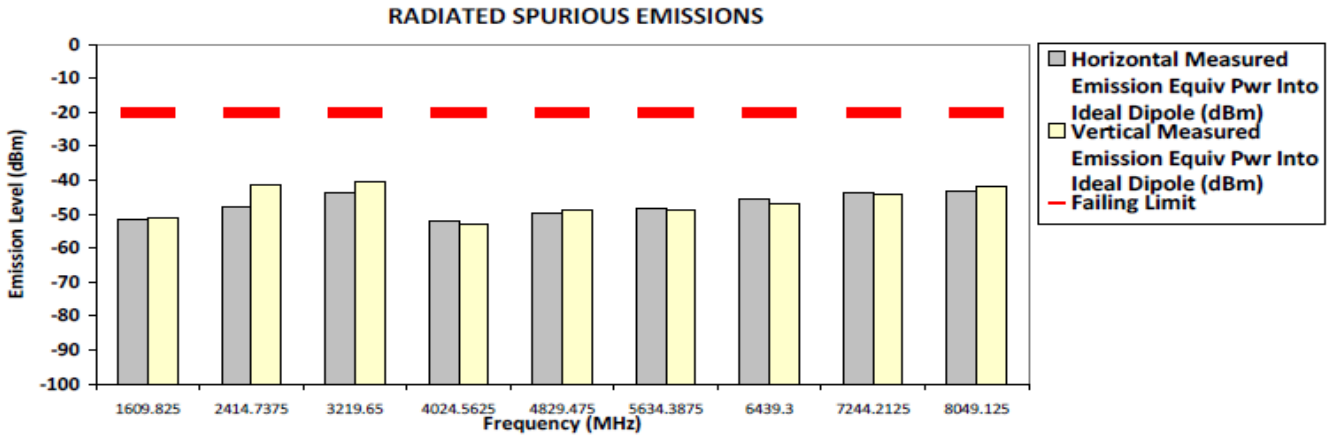


The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman Sat, Nov 10, 2018

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

*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): 70.1

System MU: 5.01 dB

*Remarks:* Passed Results | Marginal Results | Failed Results

Motorola Solutions.

IC ID: 109U-92FT7089

**SAC Transmitter Radiated Emission:**

**Model Number: M37TSS9PW1AN** **S/N: 681CTF3538** **SR:03466-EMC-00044**

**Battery Part No: NA** **Accy Part No: 3466-HMN4079G-3**

**Test Mode: TX APCO Digital Phase II**

**814.987500 MHz** **12.5 kHz** **42.000 Watt(s) /Max Power**

| Frequency (MHz) | Limit | Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm) | Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm) |
|---|---|---|---|
| 1629.9750 | -20.0000 | -52.2100 * | -51.4400 * |
| 2444.9625 | -20.0000 | -44.9400 * | -37.6100 * |
| 3259.9500 | -20.0000 | -40.6800 * | -33.9000 * |
| 4074.9375 | -20.0000 | -50.7828 ** | -51.4610 ** |
| 4889.9250 | -20.0000 | -48.5812 ** | -49.0924 ** |
| 5704.9125 | -20.0000 | -48.4221 ** | -46.9632 ** |
| 6519.9000 | -20.0000 | -45.5657 ** | -44.4122 ** |
| 7334.8875 | -20.0000 | -43.7235 ** | -43.5475 ** |
| 8149.8750 | -20.0000 | -43.0707 ** | -42.9144 ** |
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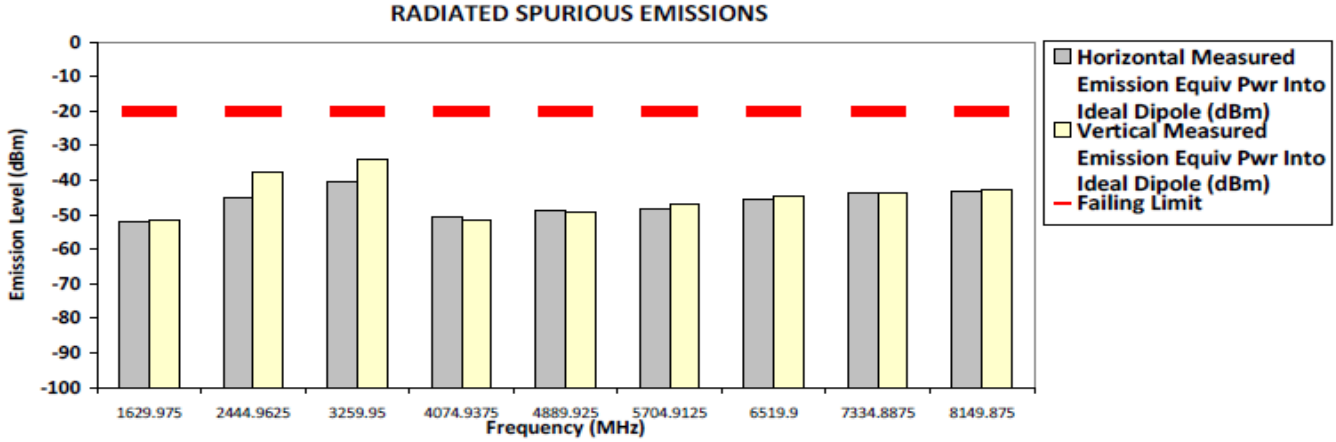


The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman Sun, Nov 11, 2018

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

*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): 70.1

System MU: 5.01 dB

*Remarks:* Passed Results | Marginal Results | Failed Results

Motorola Solutions.

IC ID: 109U-92FT7089

**SAC Transmitter Radiated Emission:**

**Model Number: M37TSS9PW1AN** **S/N: 681CTF3538** **SR:03466-EMC-00044**

**Battery Part No: NA** **Accy Part No: 3466-HMN4079G-3**

**Test Mode: TX APCO Digital Phase II**

**851.012500 MHz** **12.5 kHz** **42.000 Watt(s) /Max Power**

| Frequency (MHz) | Limit | Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm) | Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm) |
|---|---|---|---|
| 1702.0250 | -20.0000 | -50.1200 * | -50.6200 * |
| 2553.0375 | -20.0000 | -38.9900 * | -34.5300 * |
| 3404.0500 | -20.0000 | -37.5500 * | -36.8400 * |
| 4255.0625 | -20.0000 | -52.4878 ** | -52.3377 ** |
| 5106.0750 | -20.0000 | -48.3890 ** | -49.7194 ** |
| 5957.0875 | -20.0000 | -46.2615 ** | -45.3960 ** |
| 6808.1000 | -20.0000 | -43.8820 ** | -44.3459 ** |
| 7659.1125 | -20.0000 | -45.5332 ** | -45.1386 ** |
| 8510.1250 | -20.0000 | -45.1965 ** | -44.4382 ** |
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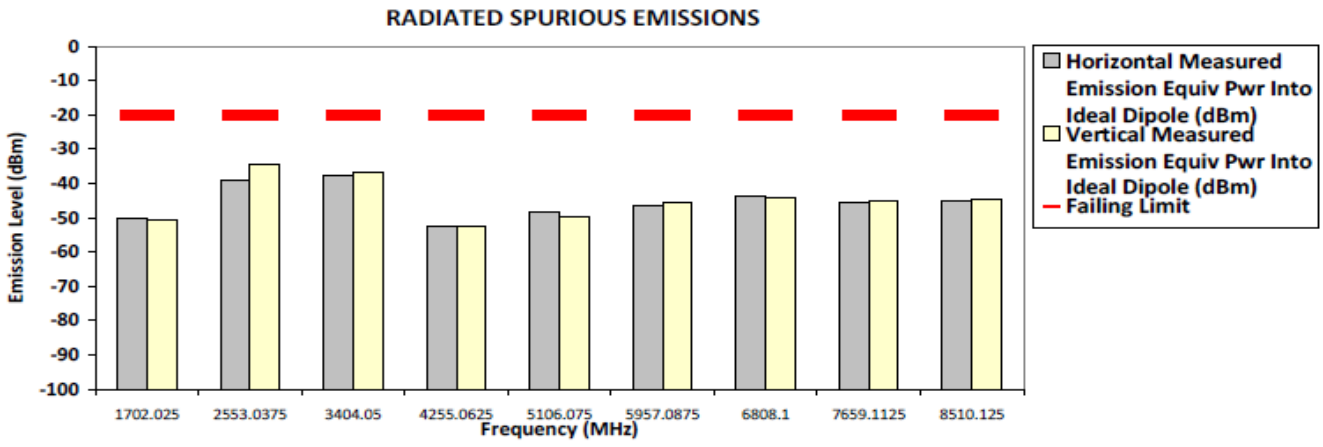



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin & Qawiman Tue, Jul 24, 2018

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

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

Temp(Deg): 23.5 Hum(%RH): 70.3

System MU: 5.01 dB

*Remarks:* Passed Results | Marginal Results | Failed Results

### 6.0.4. **Test Limit**

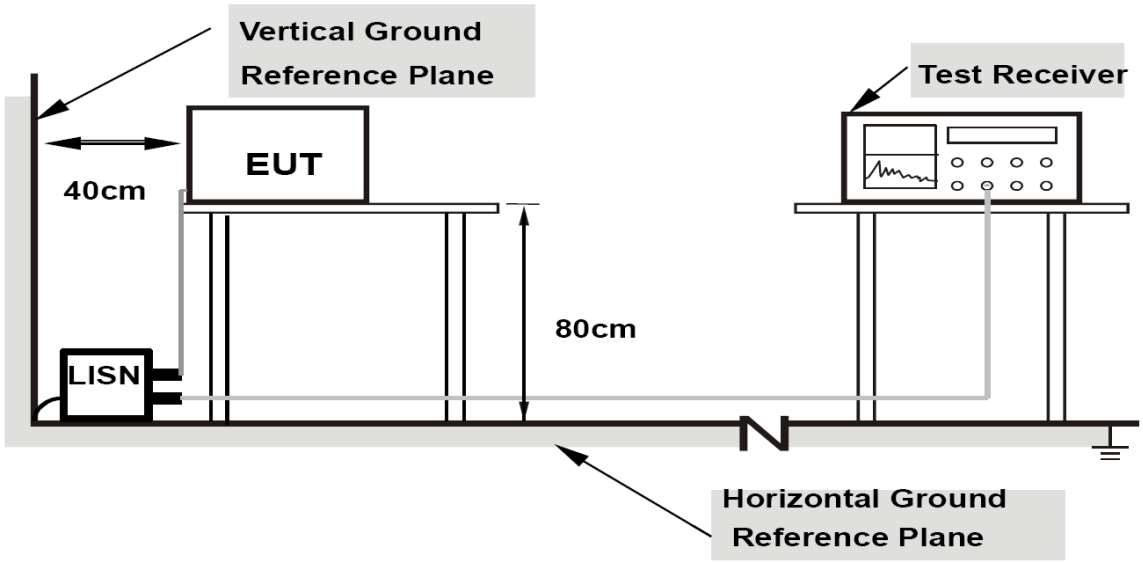
Table below summarized the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least

| Channel Spacing | Part 22 | Part 24D | Part 74 | Part 80 | Part 90 (UHF, VHF, 800, 900) | Part 90 (700) |
|---|---|---|---|---|---|---|
| 12.5kHz | 43 + log10(P) (-13 dBm) | 43 + log10(P) (-13 dBm) | 43 + log10(P) (-13 dBm) | Not Applicable | 50 + log10(P) (-20 dBm) | 43 + log10(P) (-13 dBm) |
| 25kHz | | Not Applicable | | 43 + log10(P) (-13 dBm) | 43 + log10(P) (-13 dBm) | 43 + log10(P) (-13 dBm) |

| Channel Spacing | RSS 134 | RSS 182 | RSS 119 (UHF, VHF, 800, 900) | RSS 119 (700) |
|---|---|---|---|---|
| 12.5kHz | 43 + log10(P) (-13 dBm) | Not Applicable | 50 + log10(P) (-20 dBm) | 43 + log10(P) (-13 dBm) |
| 25kHz | Not Applicable | 43 + log10(P) (-13 dBm) | 43 + log10(P) (-13 dBm) | 43 + log10(P) (-13 dBm) |

## 6.1. AC Power Line Conducted Spur Emissions

### 6.1.1. Test Setup




1) Tests were conducted for both Receive and Transmit Mode of the EUT.
2) The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/50uH of coupling impedance for the measuring instrument.
3) Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
4) The frequency range from 150 kHz to 30MHz was measured.

### 6.1.2. Test Results

Not Applicable

### 6.1.3. Test Limits

For AC Power Line Conducted Test Limit can be Class A or B depends on product classification.

**Limits for conducted disturbance at the mains ports of class A ITE**

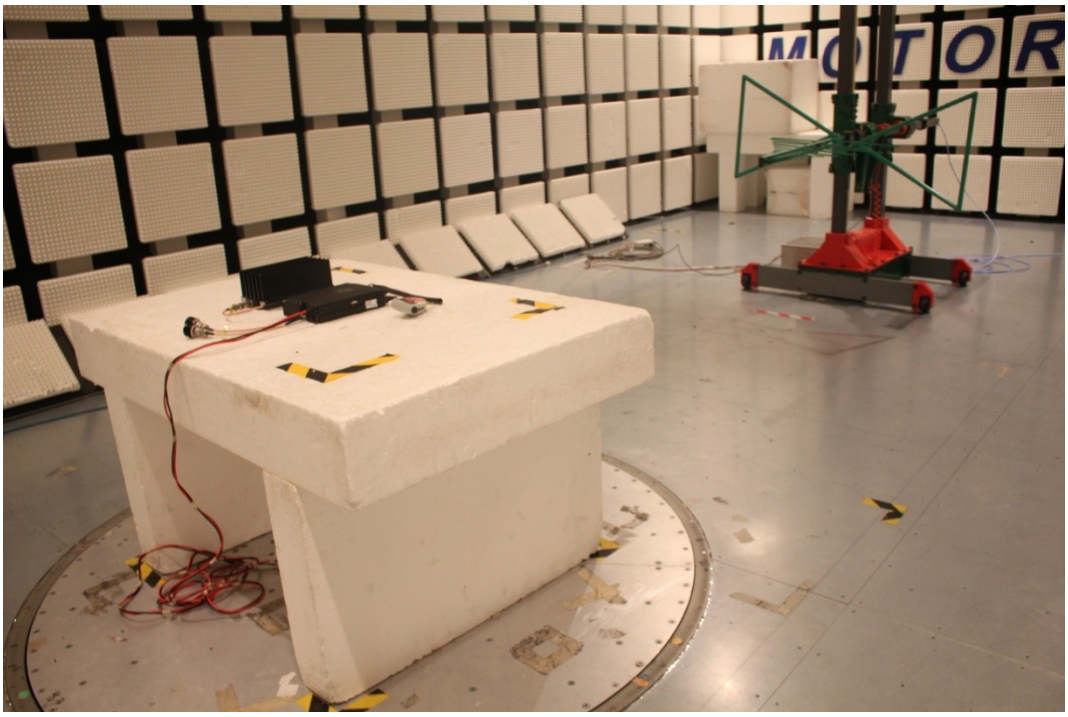
| Frequency range MHz | Limits dB(µV) | |
|---|---|---|
| | Quasi-peak | Average |
| 0,15 to 0,50 | 79 | 66 |
| 0,50 to 30 | 73 | 60 |
| NOTE The lower limit shall apply at the transition frequency. | | |

**Limits for conducted disturbance at the mains ports of class B ITE**

| Frequency range MHz | Limits dB(µV) | |
|---|---|---|
| | Quasi-peak | Average |
| 0,15 to 0,50 | 66 to 56 | 56 to 46 |
| 0,50 to 5 | 56 | 46 |
| 5 to 30 | 60 | 50 |
| NOTE 1 The lower limit shall apply at the transition frequencies.<br>NOTE 2 The limit decreases linearly with the logarithm of the frequency in the range 0,15 MHz to 0,50 MHz. | | |

# 7.0. Appendix: Test Setup Photo

## 7.1. Radiated Spur Emission Station Setup



## 7.2. AC Power Line Conducted Emission Station Setup

**Not Applicable**

## 7.3. Photographs – EUT

**~ End of Report ~**