

	 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																										
<table><tr><td>Date/s Tested</td><td>: 24-July-2018 to 12-Nov-2018</td></tr><tr><td>Manufacturer/Location</td><td>: Motorola Solutions – Penang</td></tr><tr><td>Requestor</td><td>: HERI NIEVES</td></tr><tr><td>Product Type</td><td>: Mobile</td></tr><tr><td>Model Number</td><td>: M37TSS9PW1AN</td></tr><tr><td>Frequency Band</td><td>: VHF 136-174MHz, UHF1 380-484MHz, UHF2 485-520MHz, 700MHz 764-805MHz, 800MHz 806-870MHz</td></tr><tr><td>Rated / Max RF Output Power</td><td>: 1-60 Watts</td></tr><tr><td>Applicant Name</td><td>: Motorola Solutions Malaysia Sdn Bhd</td></tr><tr><td>Firmware Version</td><td>: R17.11.02</td></tr><tr><td>Codeplug Version</td><td>: B18.00.00.23</td></tr><tr><td>ISED Registrations</td><td>: 109AK</td></tr><tr><td>FCC Test Firm Registrations</td><td>: 461337</td></tr></table> The equipment was tested accordance to the requirement listed below: <table><tr><td>(LMR) FCC 47 CFR Part 22/ 74/ 90/ 80 ISED RSS-Gen/119/ 182</td><td>PASS</td></tr></table>		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	(LMR) FCC 47 CFR Part 22/ 74/ 90/ 80 ISED RSS-Gen/119/ 182	PASS
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Prepared By:  Zulhairudin Zulkifli Technician	Approved By:  Ho SzeKhian Responsible Engineer																										

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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	Expanded 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

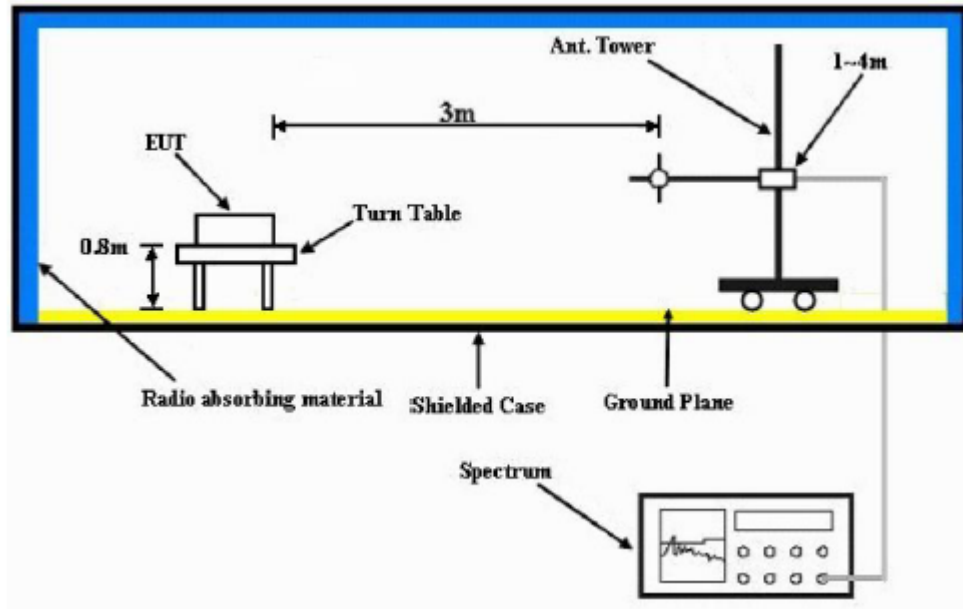
5.1 Test Conditions

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 Tx(MHz) 158.5500,459.125,774.8875, 804.9125,814.9875,851.0125	Nazrin & Qawiman

NA → Not Applicable

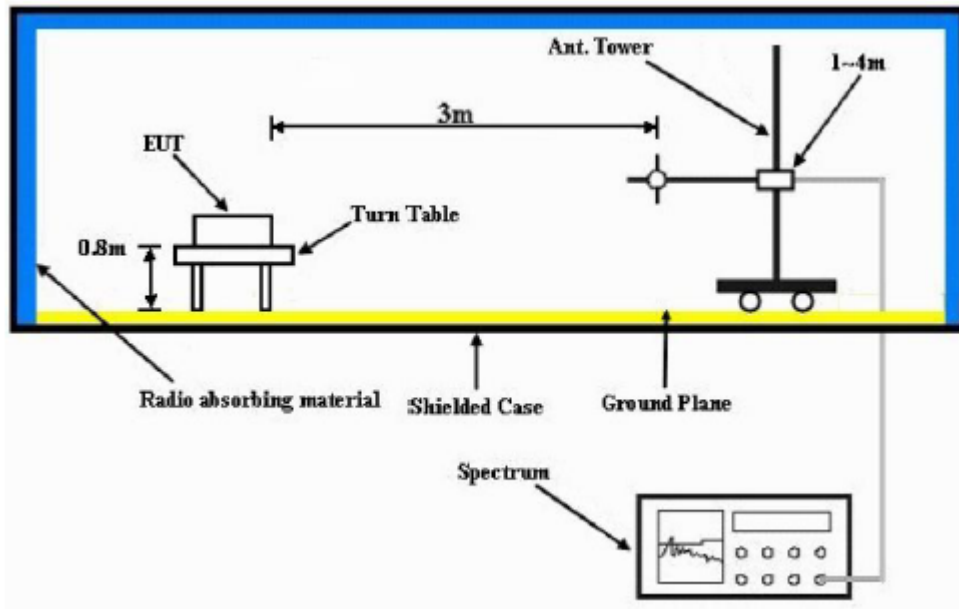
6.0. Radiated Spurious Output Power

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)

Motorola Solutions.

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

Model#: M37TSS9PW1AN Test: SAC Receiver Radiated Emission 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

[illegible]

Remarks: Pass Result	Marginal Result	Fail Result
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Temperature (degC): 23.5
Test Performed by: Nazrin & Qawiman
System MU: 5.01dB

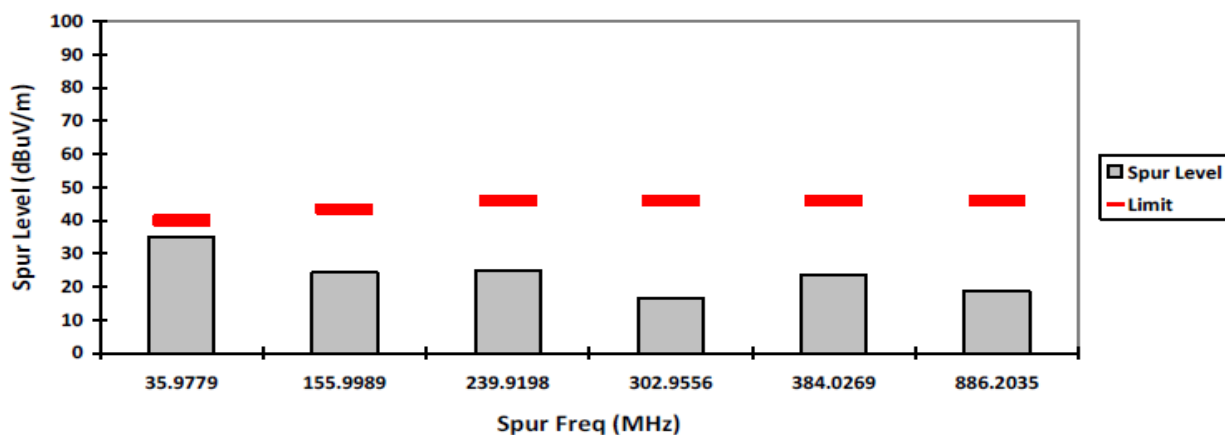
Humidity (%): 70.3
Test Date: Wed, Jul 25, 2018

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.

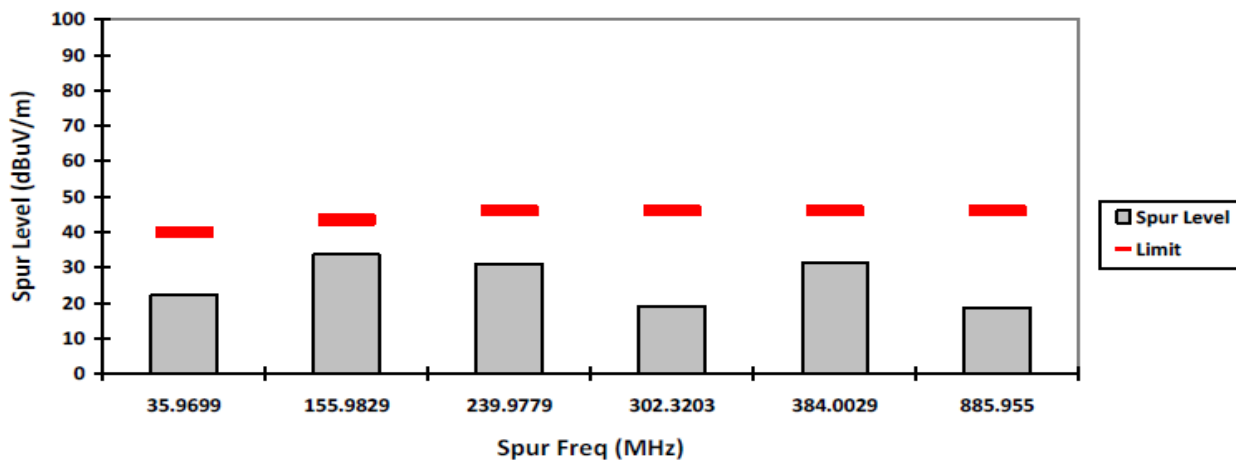
Motorola Solutions.

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

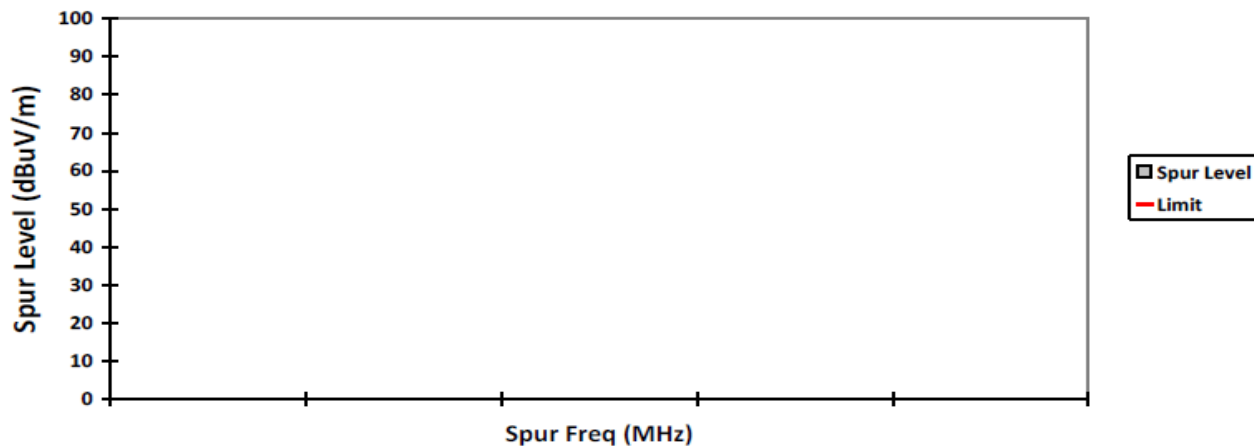
VERTICAL, QPK



HORIZONTAL, QPK



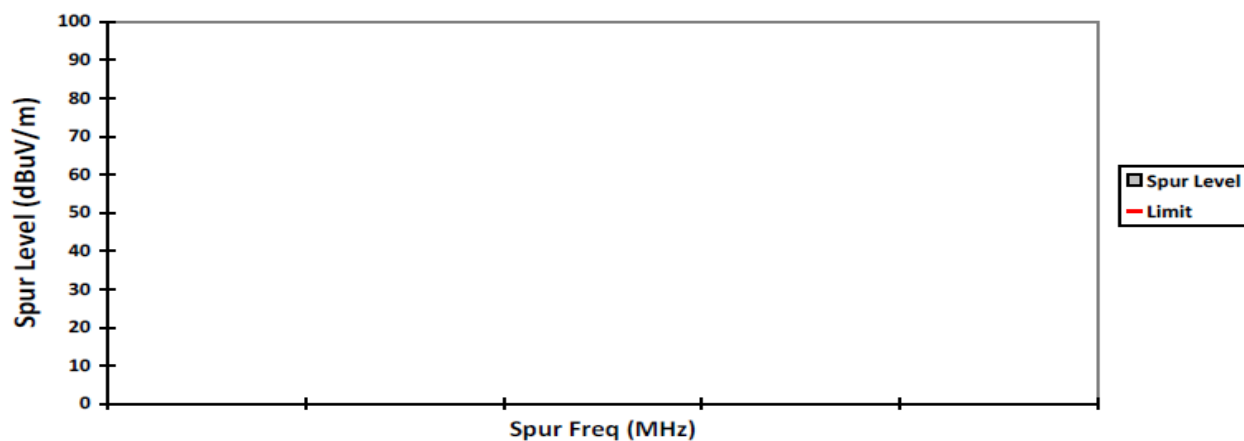
VERTICAL, PK



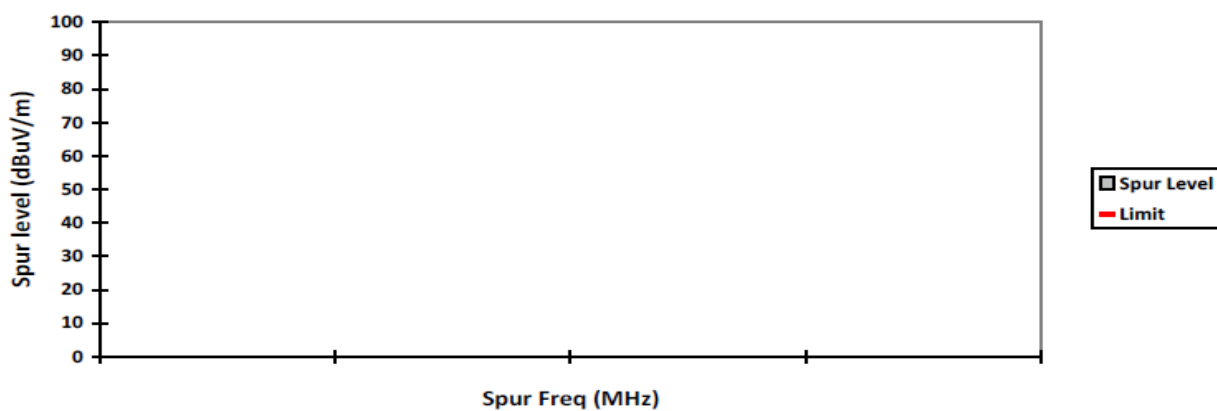
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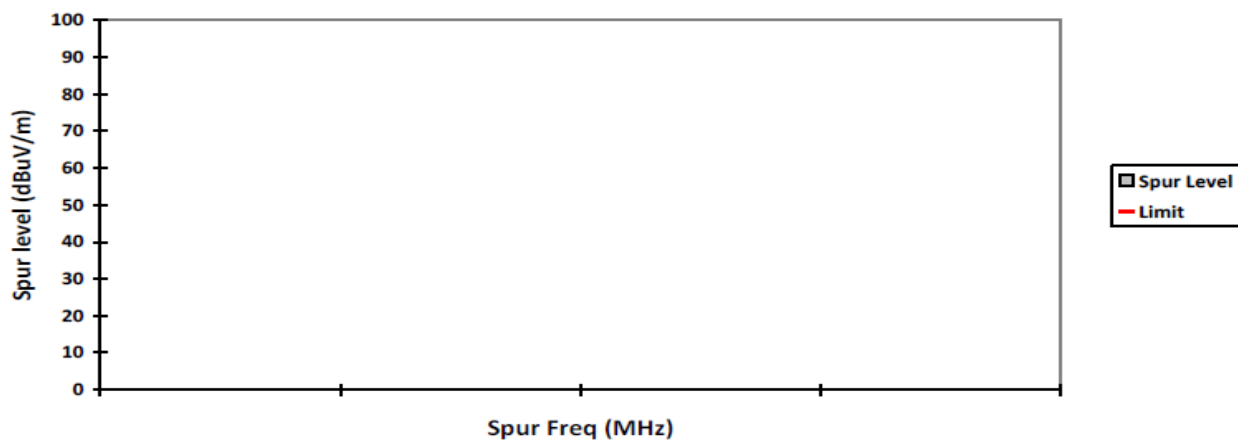
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



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

Model#: M37TSS9PW1AN Test: SAC Receiver Radiated Emission 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

Vertical Radiated Emission Result

[illegible]

Remarks: Pass Result	Marginal Result	Fail Result
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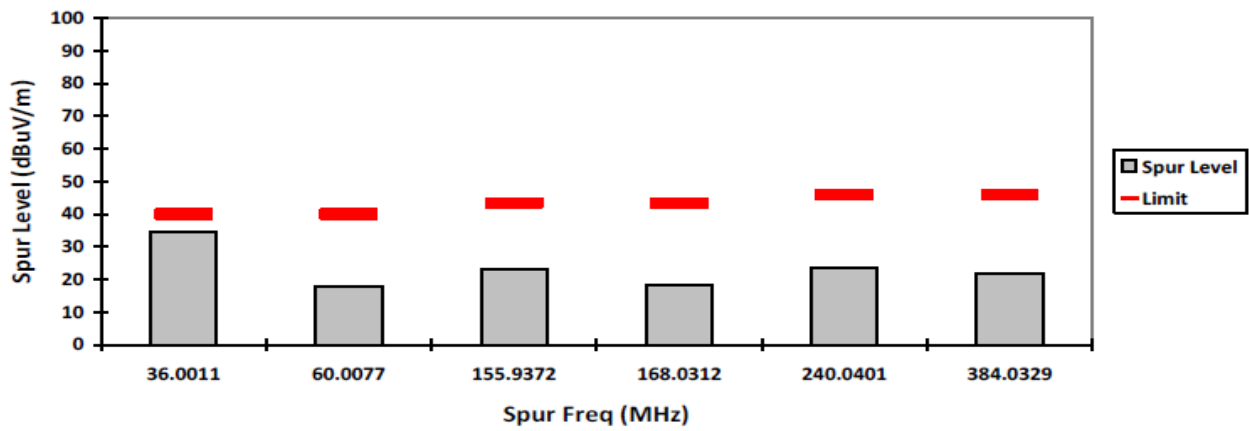
Humidity (%): 70.3
Test Date: Wed, Jul 25, 2018

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.

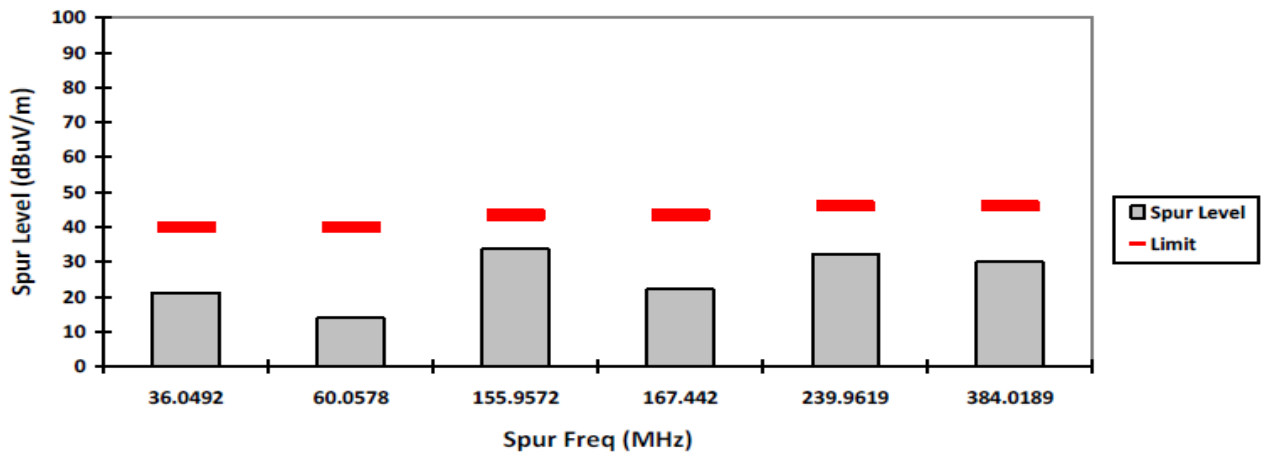
Motorola Solutions.

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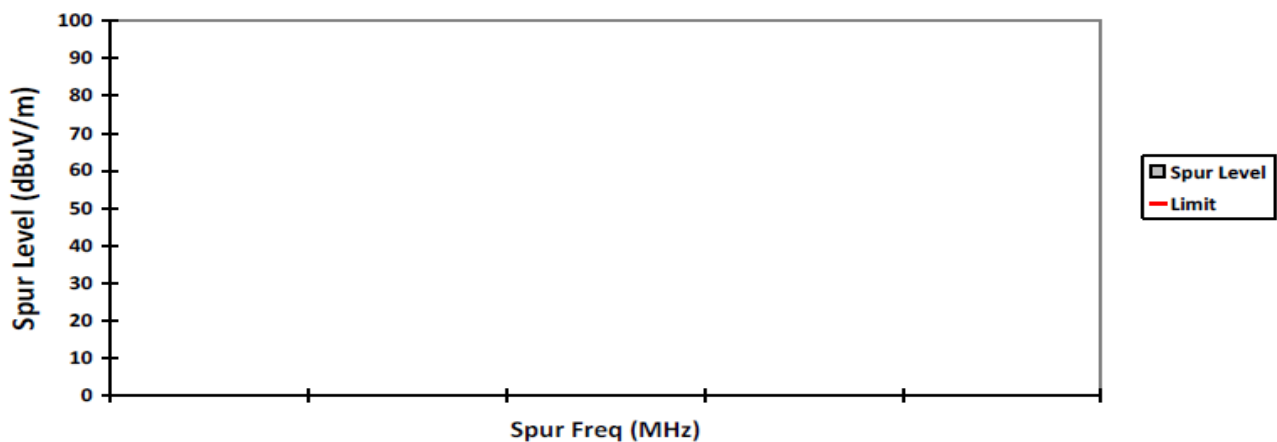
VERTICAL, QPK



HORIZONTAL, QPK



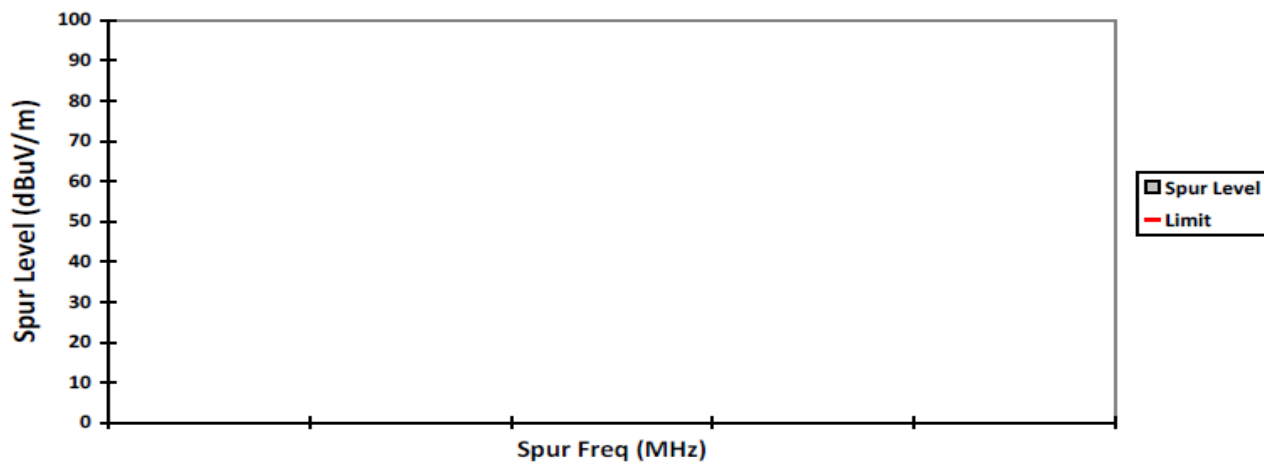
VERTICAL, PK



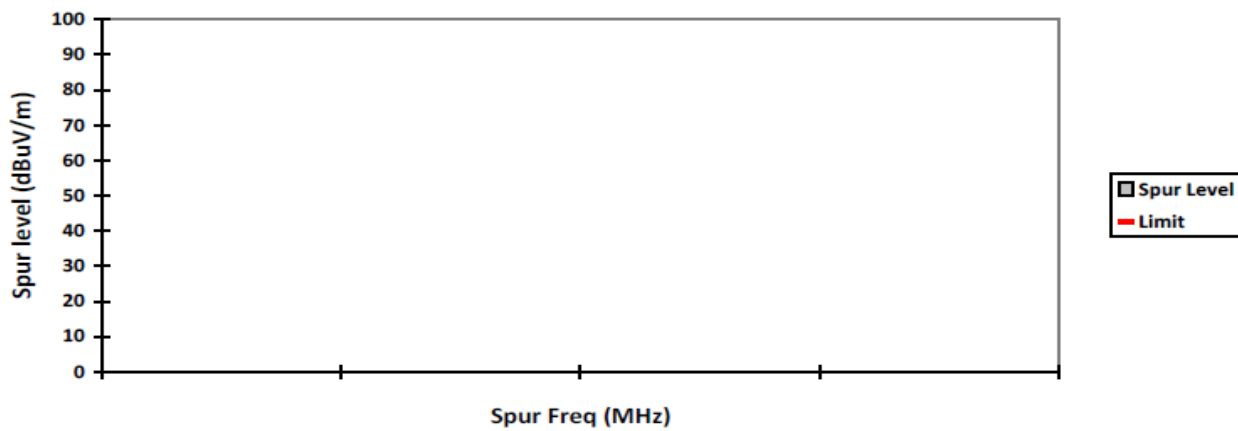
Motorola Solutions.

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

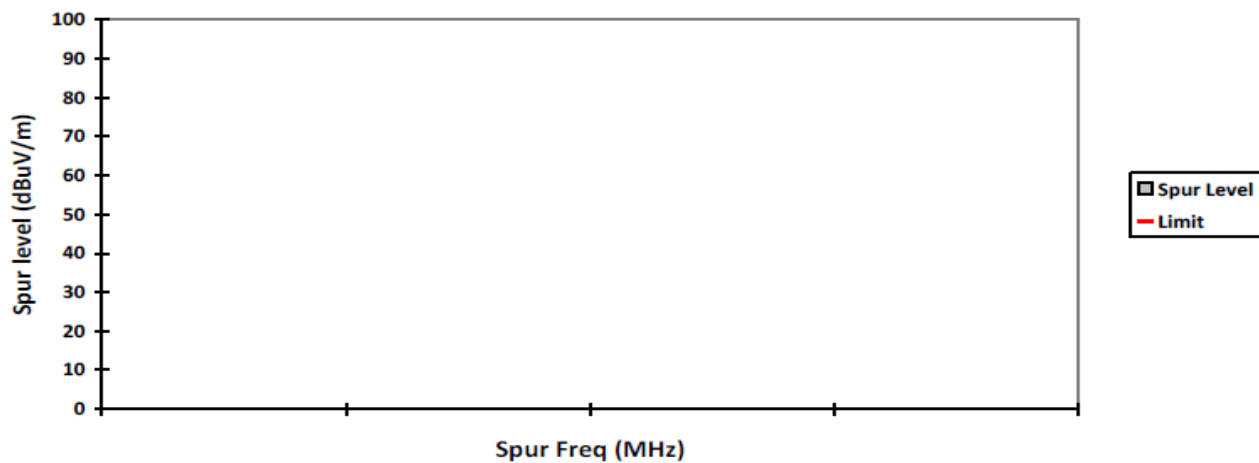
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



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

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

Vertical Radiated Emission Result

[illegible]

Remarks: Pass Result	Marginal Result	Fail Result
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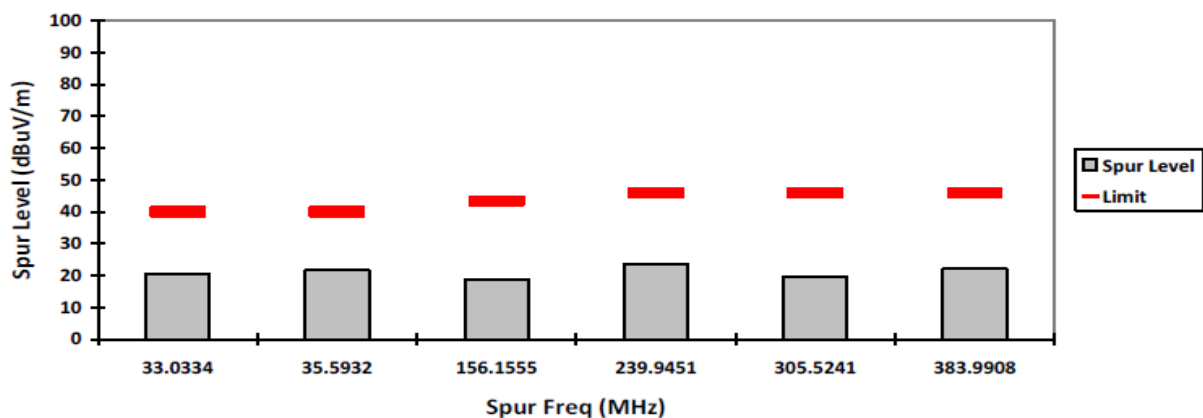
Humidity (%): 70.3
Test Date: Wed, Jul 25, 2018

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

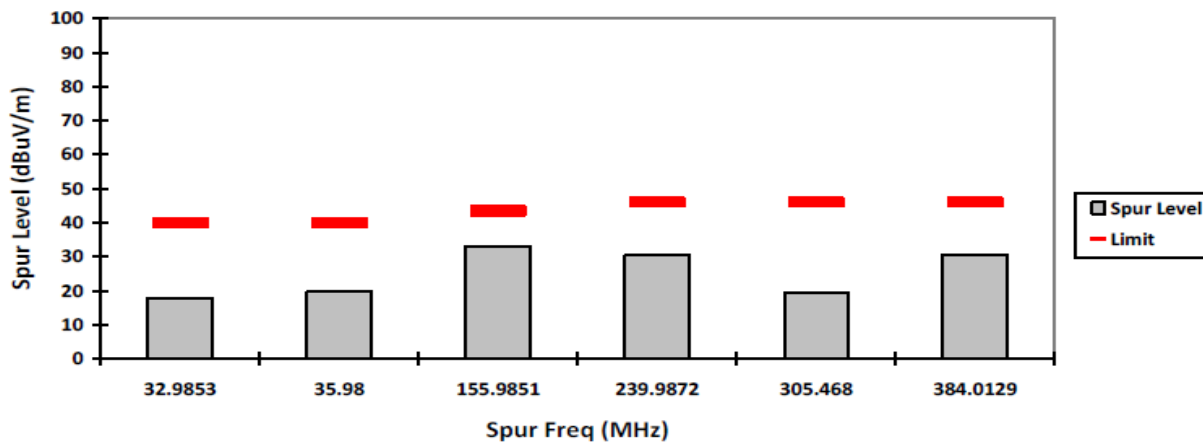
Motorola Solutions.

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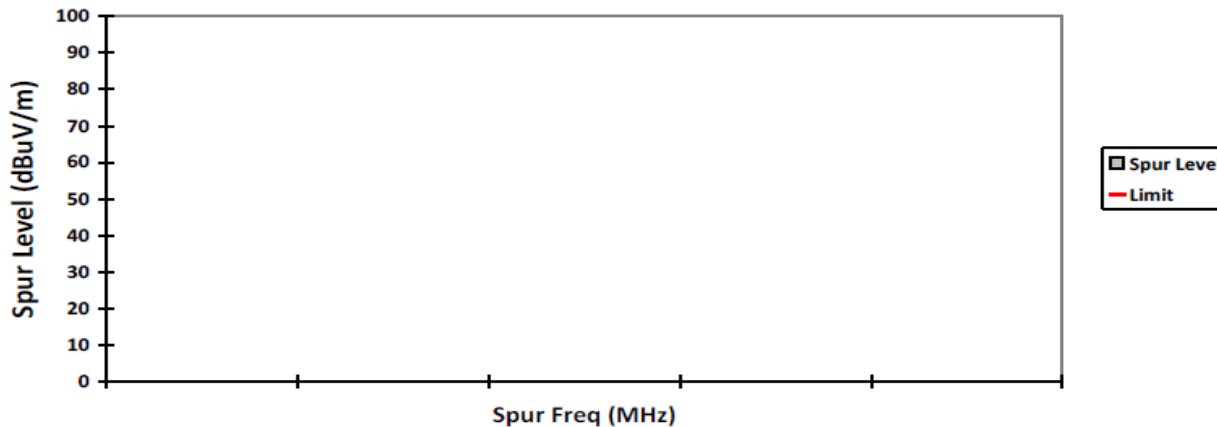
VERTICAL, QPK



HORIZONTAL, QPK



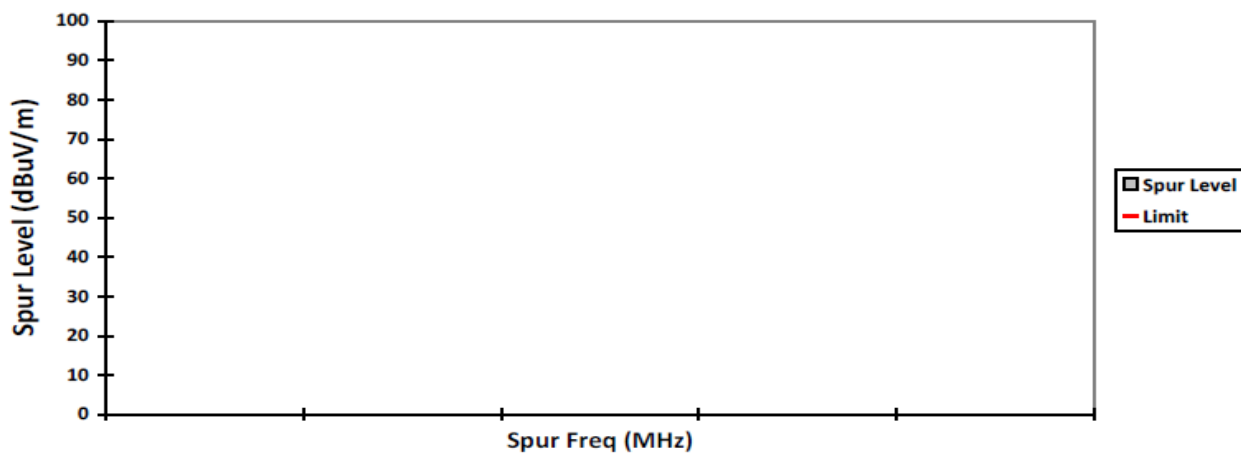
VERTICAL, PK



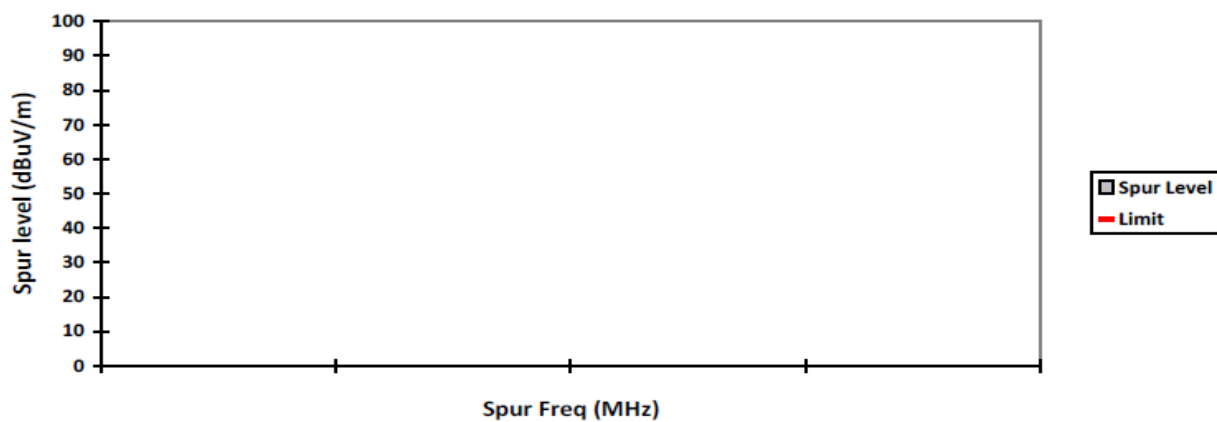
Motorola Solutions.

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

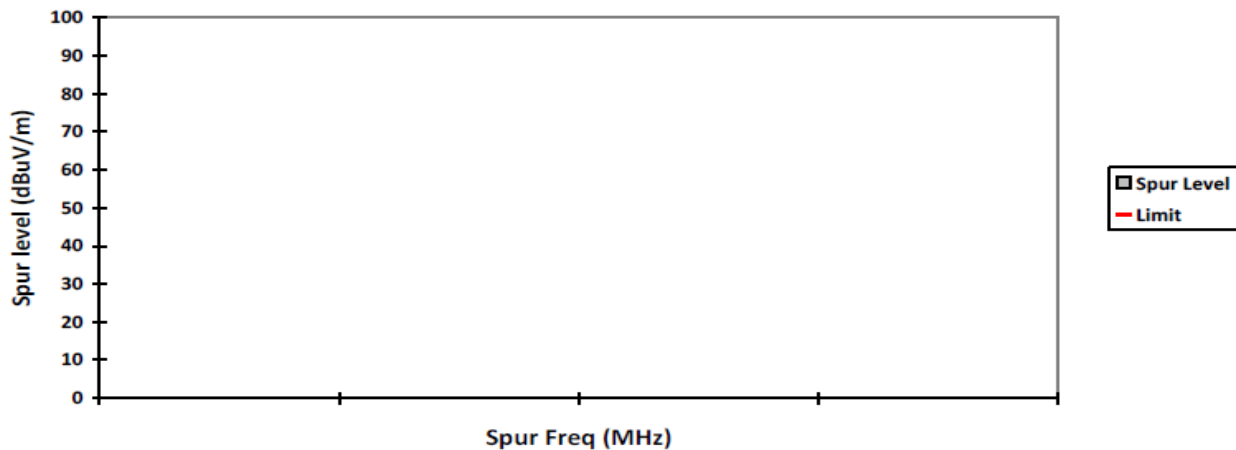
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



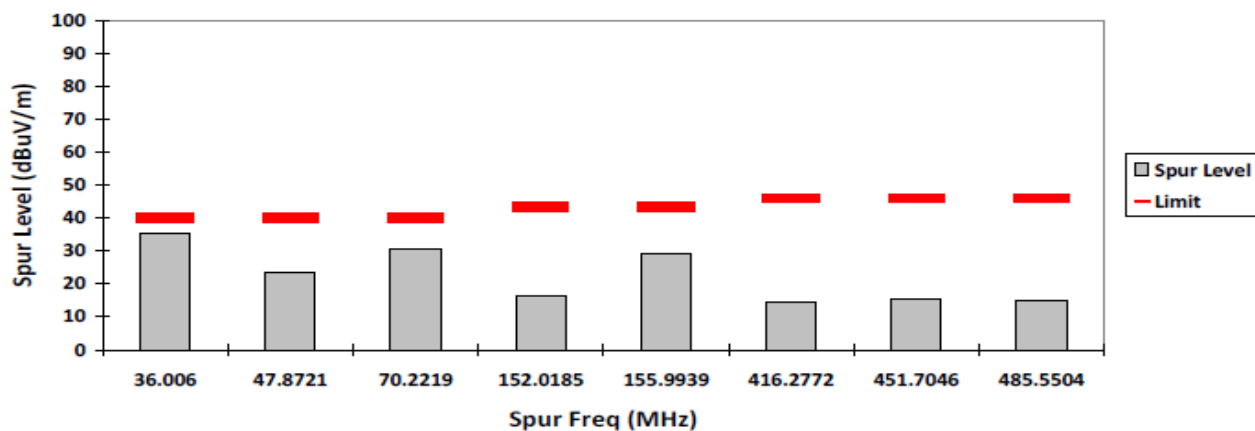
FCC ID: AZ492FT7089, IC ID: 109U-92FT7089

Test: SAC Receiver Radiated Emission

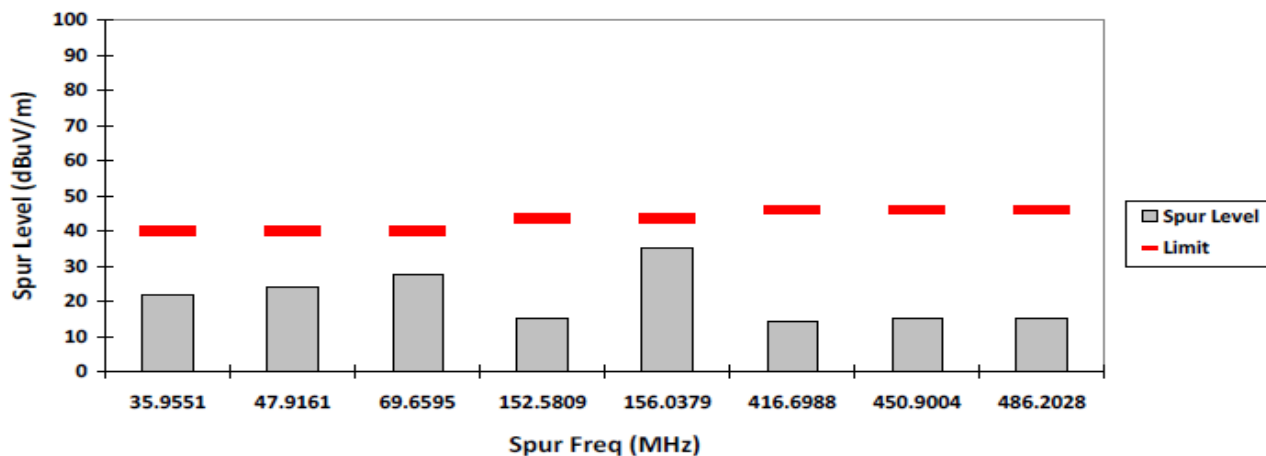
Motorola Solutions.

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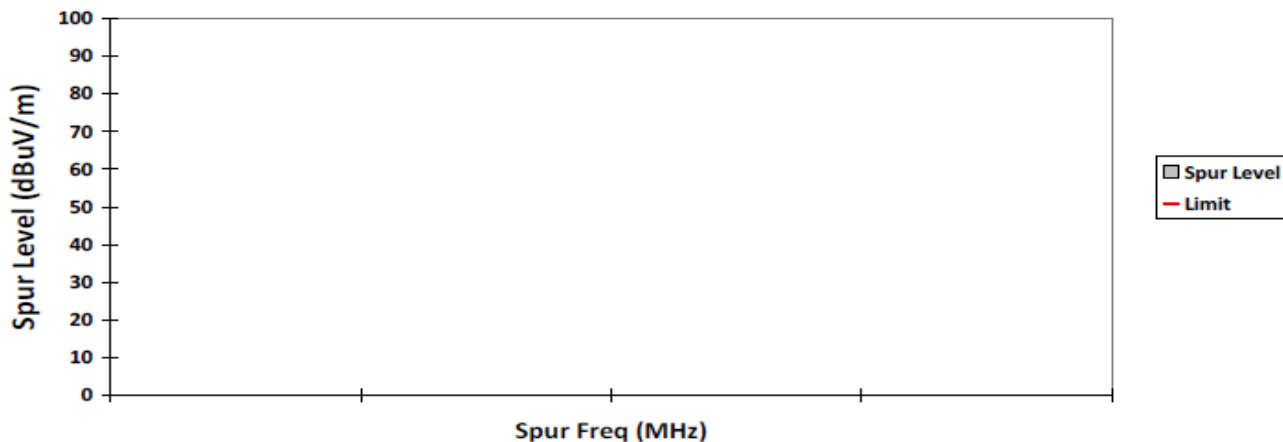
VERTICAL, QPK



HORIZONTAL, QPK



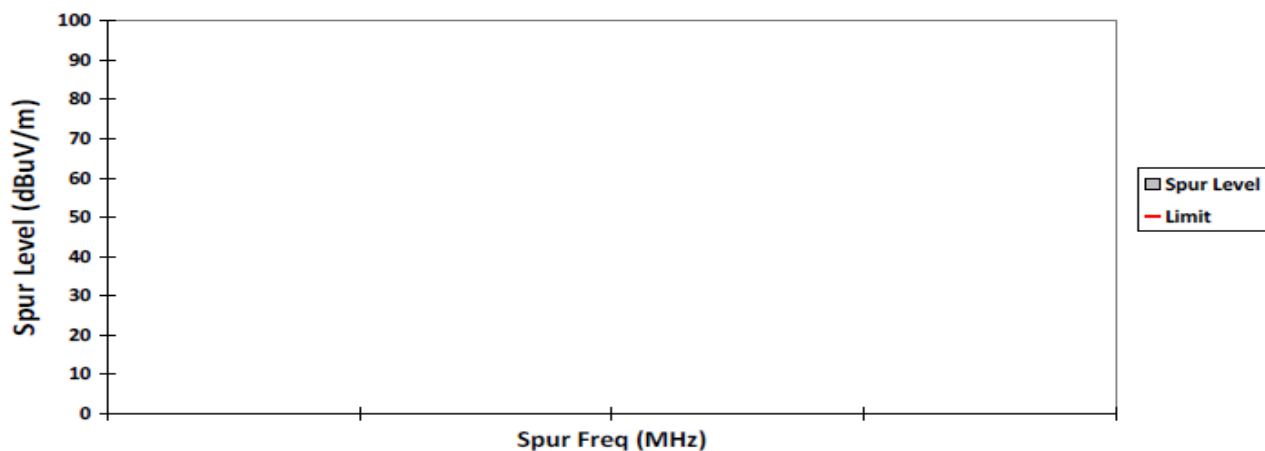
VERTICAL, PK



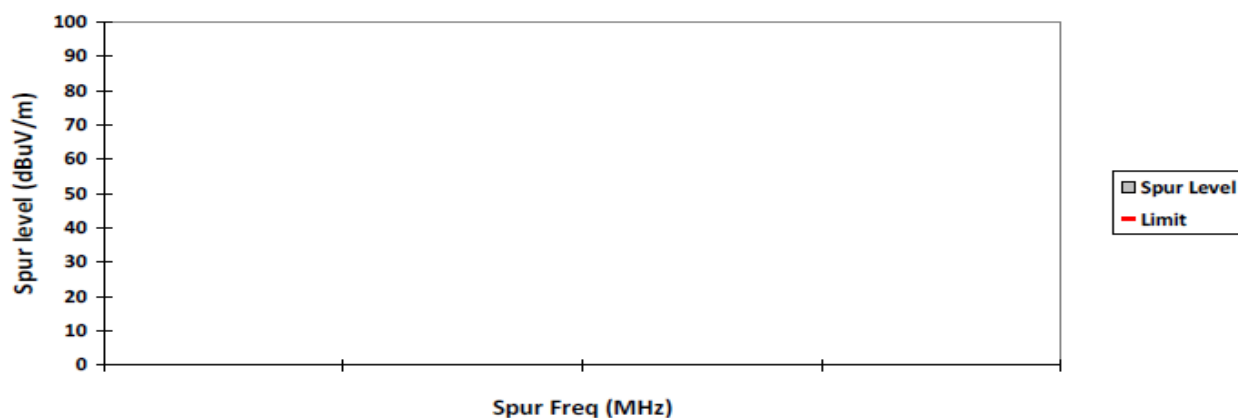
Motorola Solutions.

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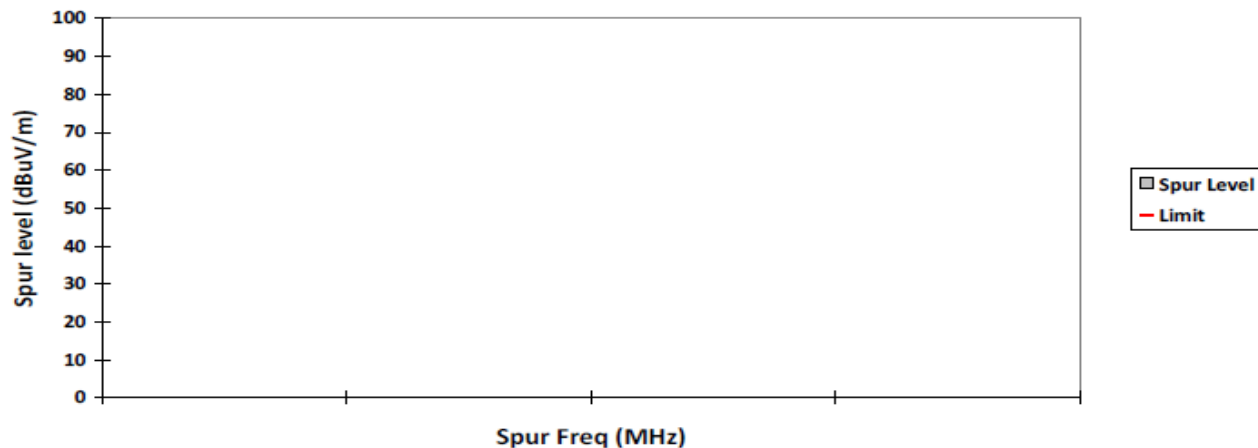
HORIZONTAL, PK



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

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)
36.1583	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
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Temperature (degC): 23.5
 Test Performed by: Nazrin & Qawiman
 System MU: 5.01dB

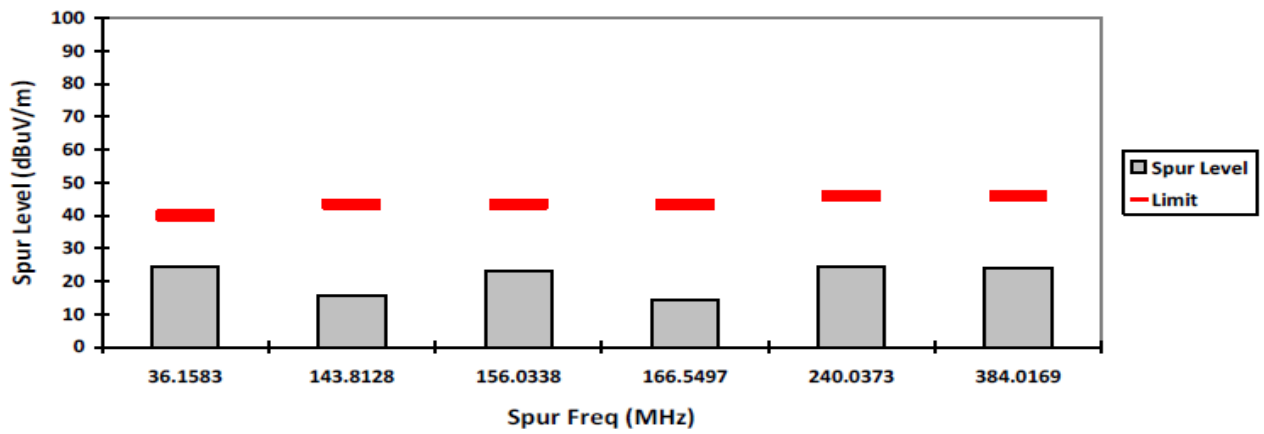
Humidity (%): 70.3
 Test Date: Wed, Jul 25, 2018

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.

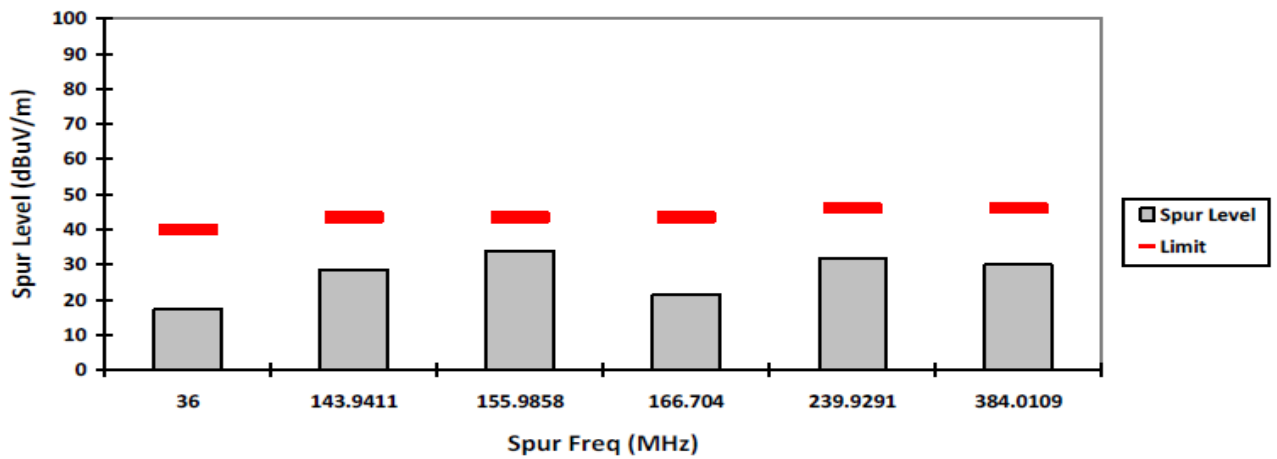
Motorola Solutions.

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

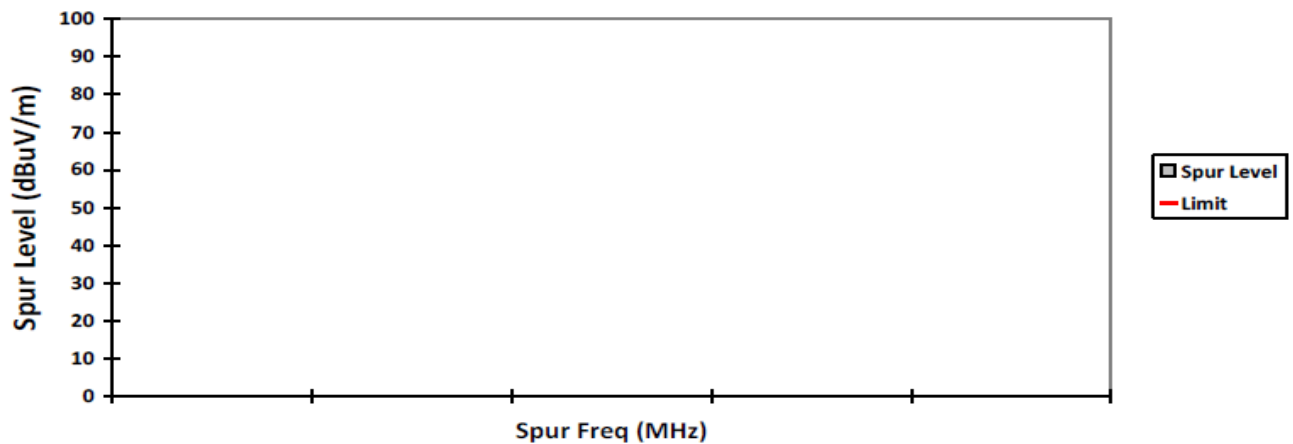
VERTICAL, QPK



HORIZONTAL, QPK



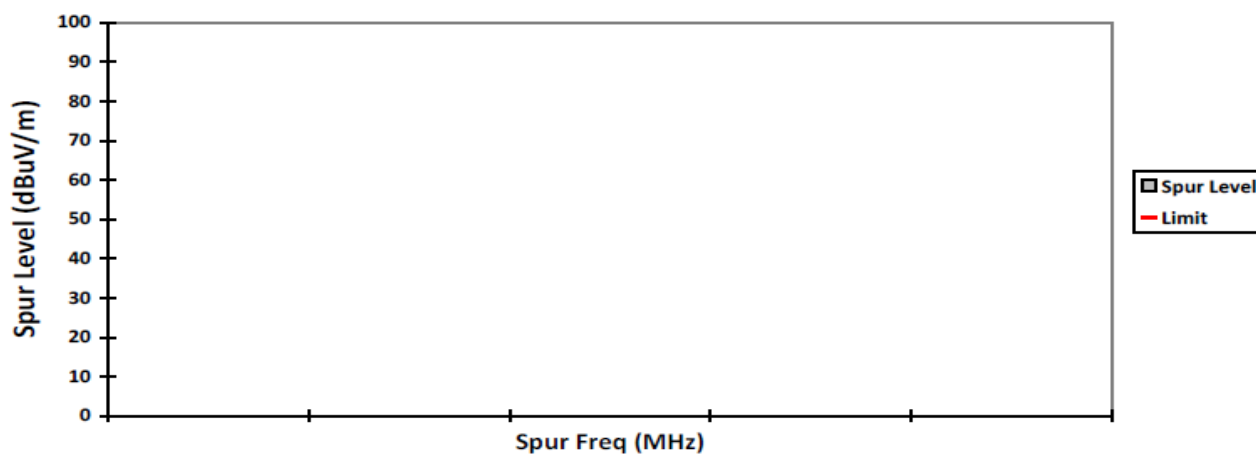
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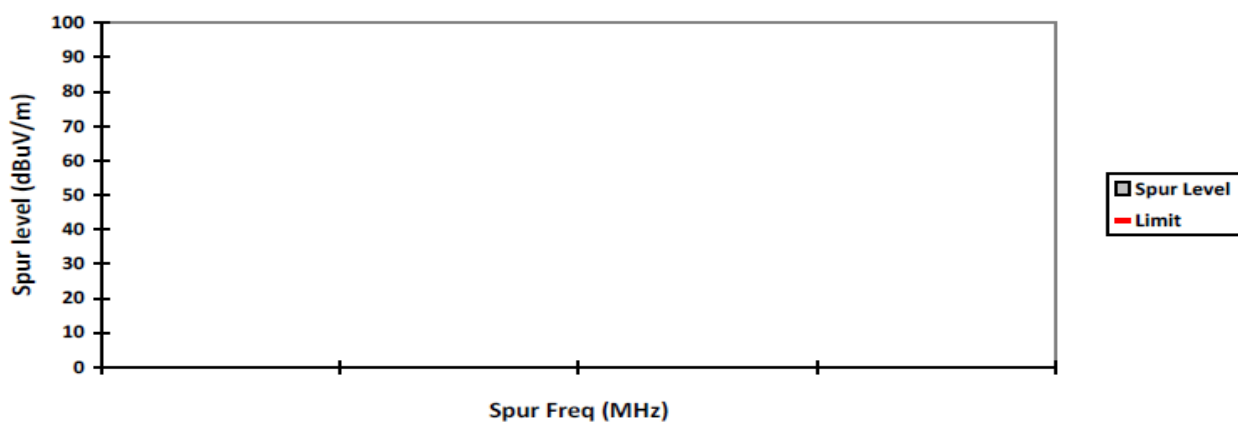
Motorola Solutions.

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

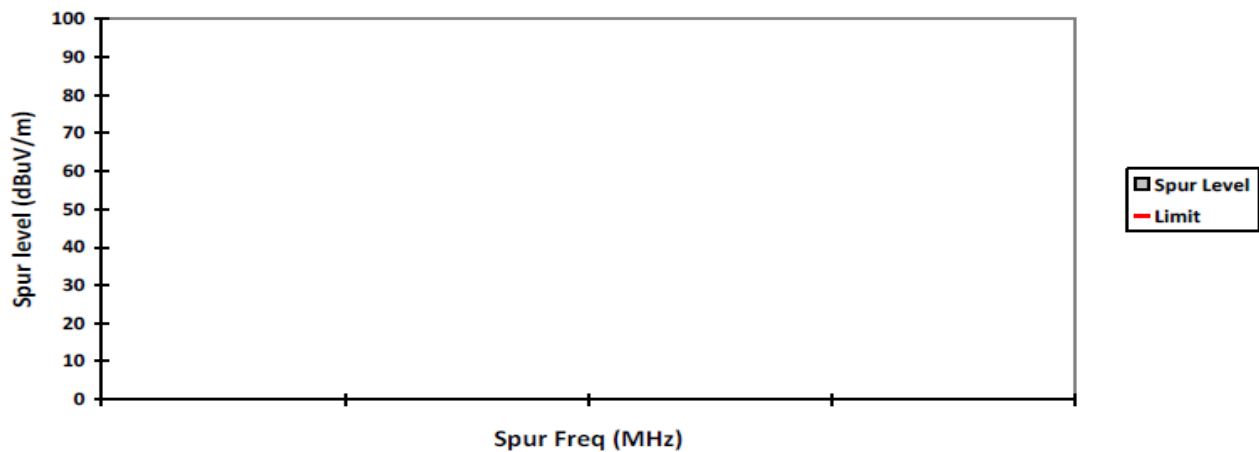
HORIZONTAL, PK



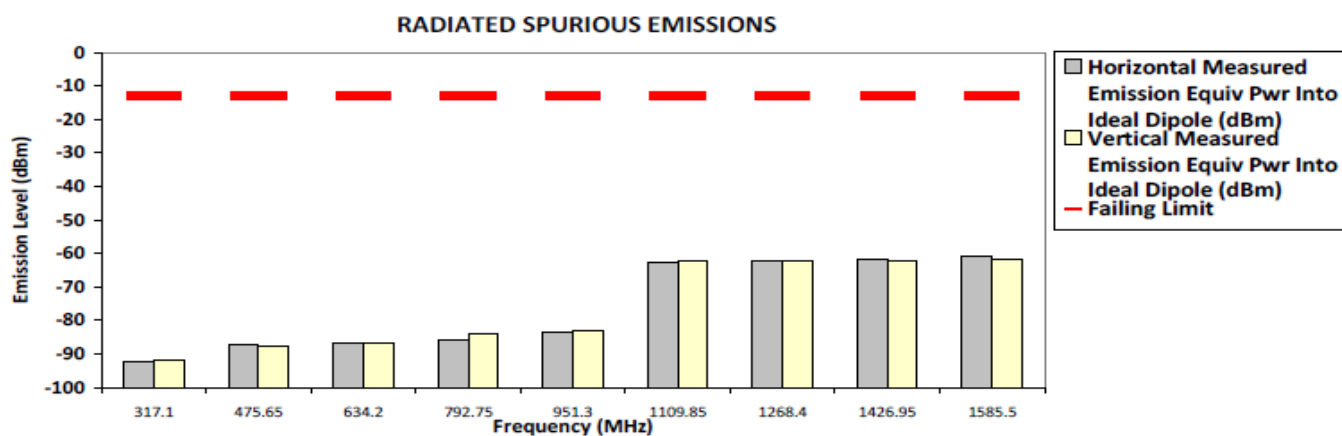
VERTICAL, AV



HORIZONTAL, AV



158.550000 MHz

[illegible]

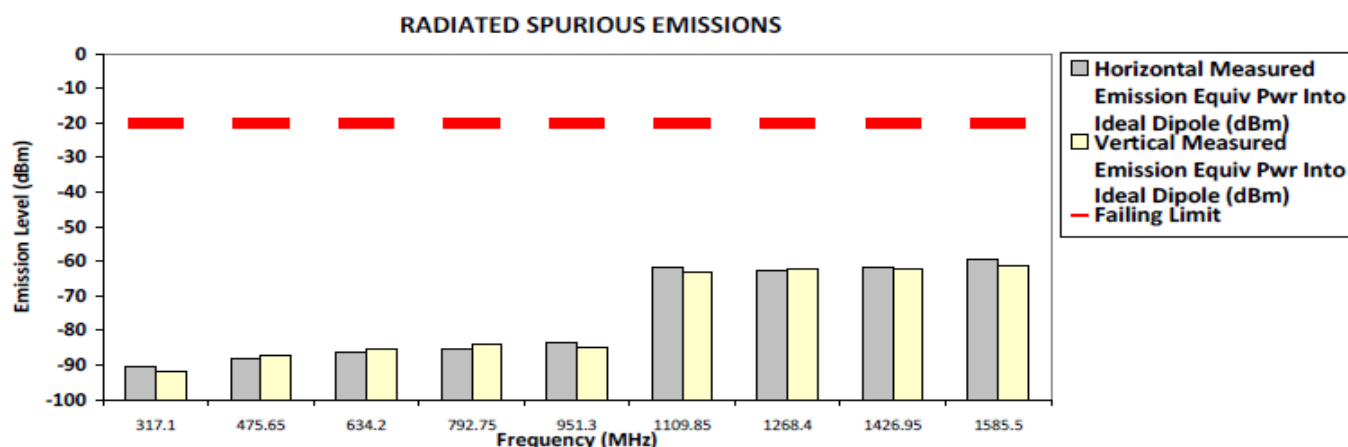
The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.
Motorola Penang EMC Lab - Test Performed by: Nazrin & Qawiman Wed, Jul 25, 2018

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
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158.550000 MHz

[illegible]

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

*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

Remarks:

Passed Results	Marginal Results	Failed Results
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158.550000 MHz

12.5 kHz

60.000 Watt(s) /Max Power

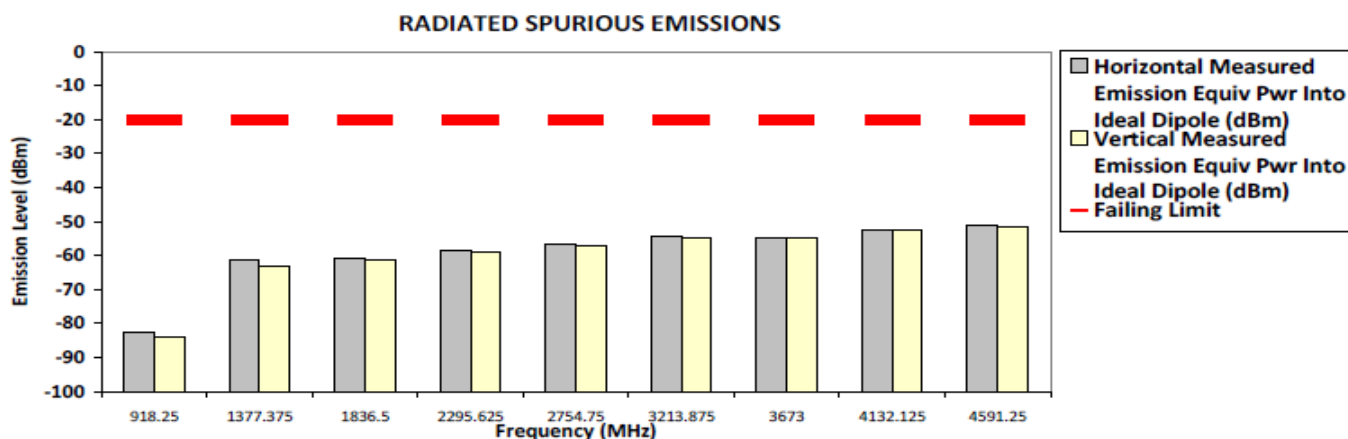
459.125000 MHz

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 **



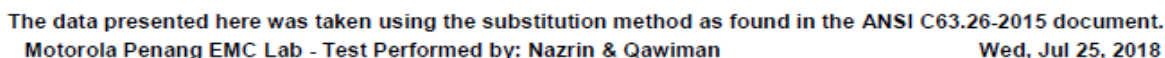
The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.
 Motorola Penang EMC Lab - Test Performed by: Nazrin & Qawiman Wed, Jul 25, 2018

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
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[illegible]

System MU: 5.01 dB

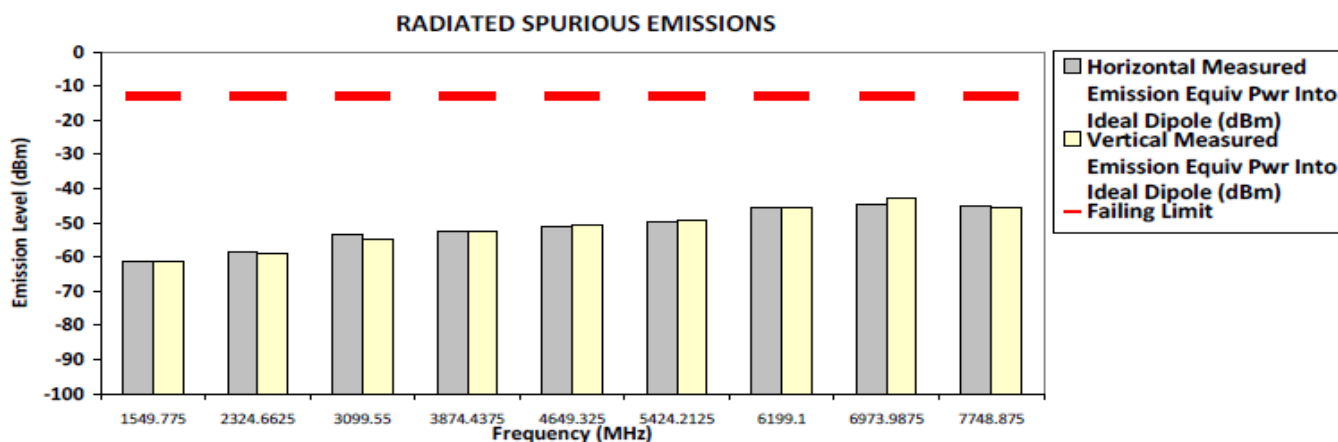
Failed Results

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 **



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

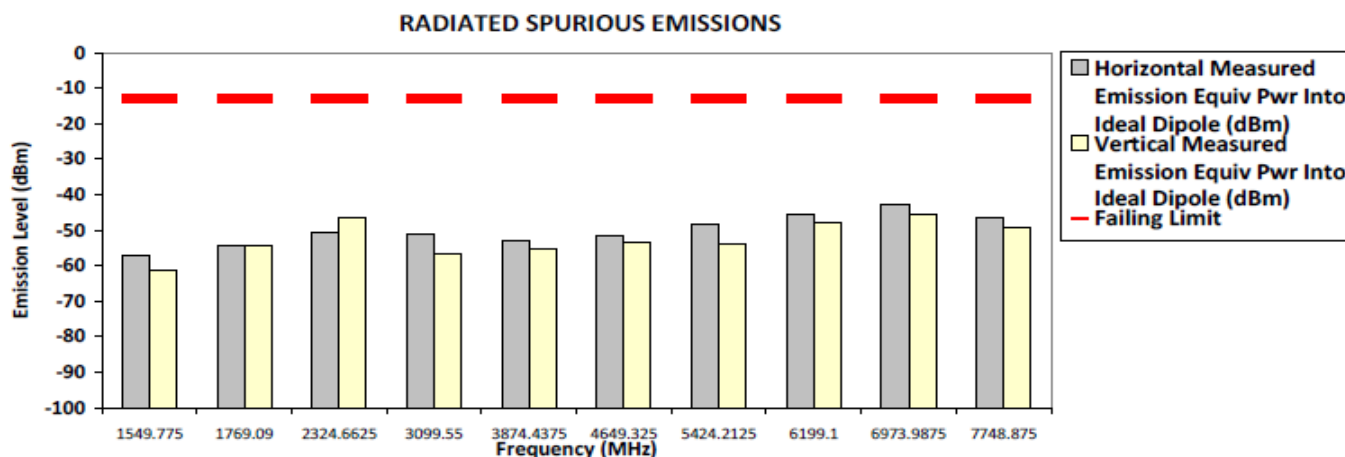
Remarks:

Passed Results	Marginal Results	Failed Results
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Motorola Solutions.

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 **



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

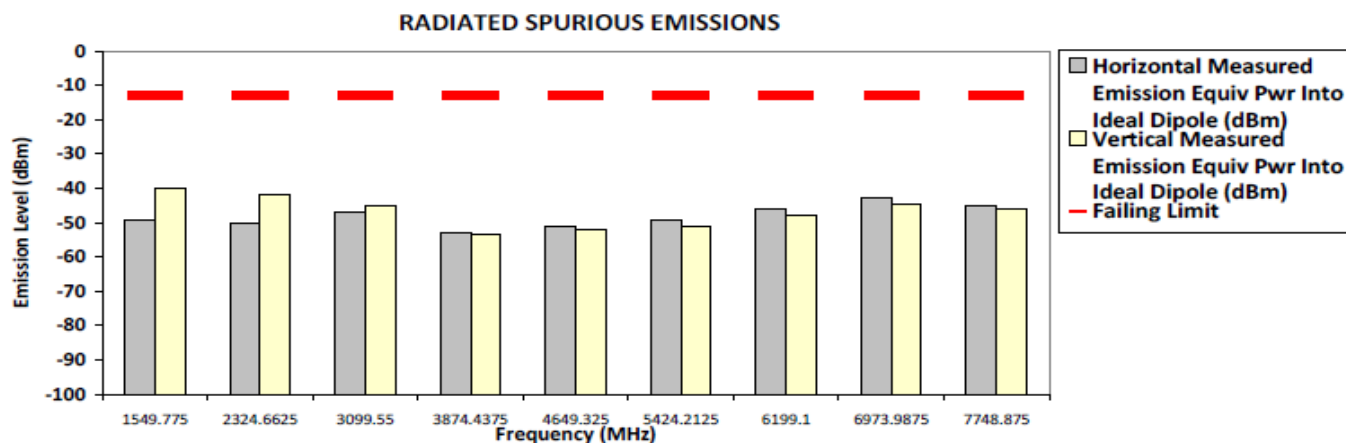
Remarks: Passed Results Marginal Results Failed Results

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 **



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
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Motorola Solutions.

FCC ID: AZ492FT7089

SAC Transmitter Radiated Emission:

Model Number: M37TSS9PW1AN
Battery Part No: NA

S/N: 681CTF3538

SR:03466-EMC-00044

Accy Part No: 3466-HMN4079G-3

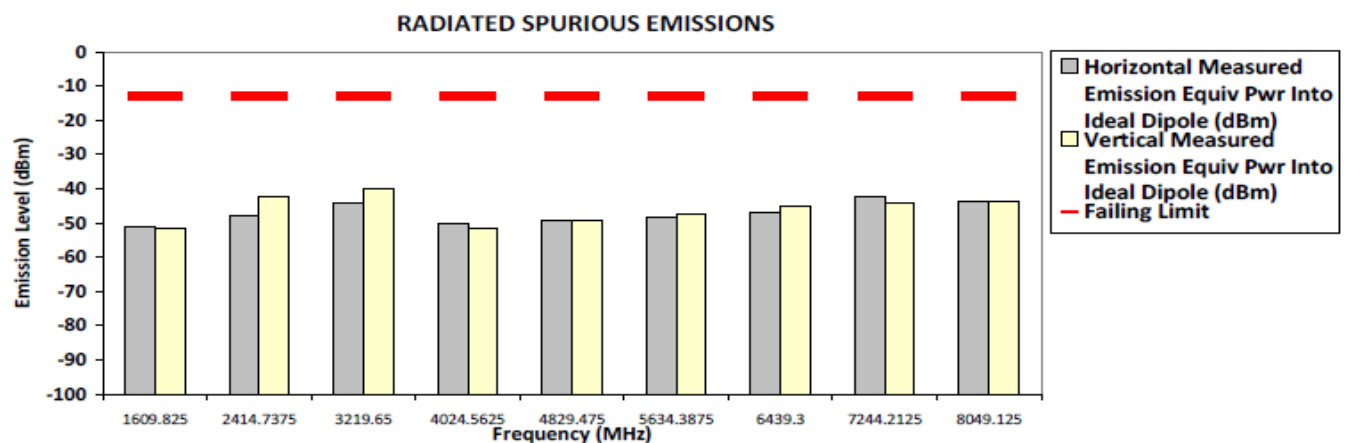
Test Mode: TX Analog

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 **



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
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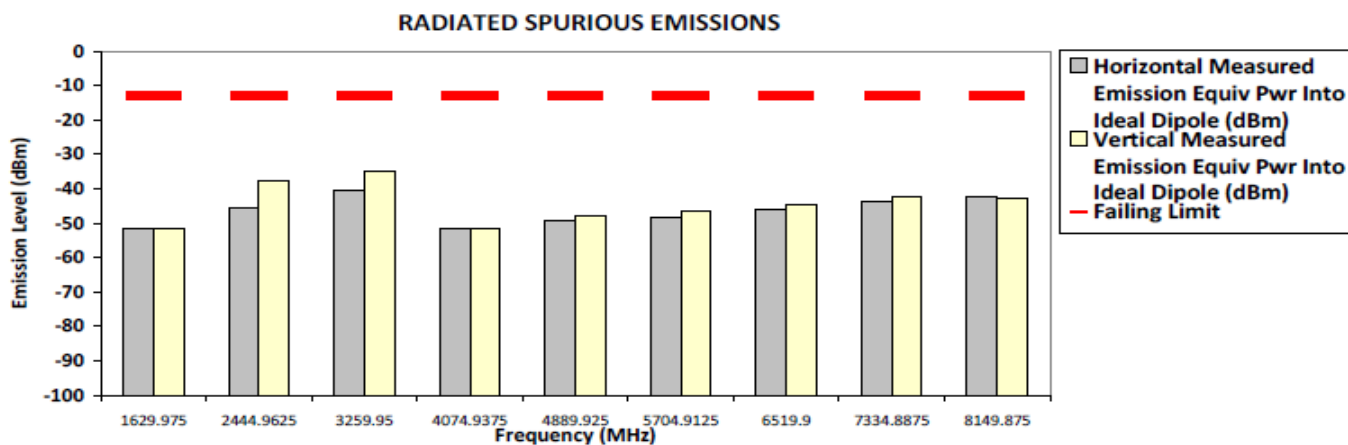
Motorola Solutions.

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 **



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:

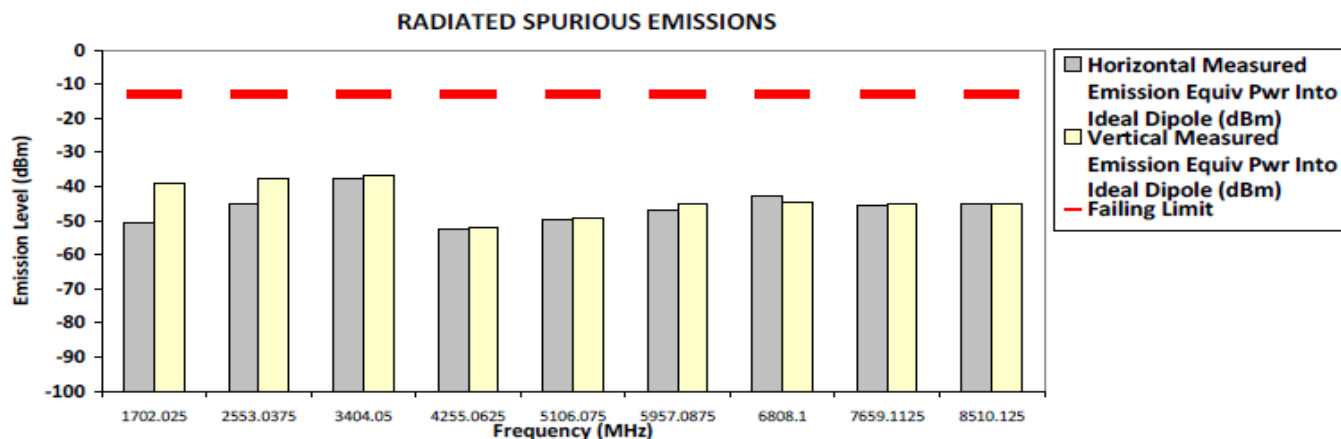
Passed Results	Marginal Results	Failed Results
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Motorola Solutions.

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 **



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:

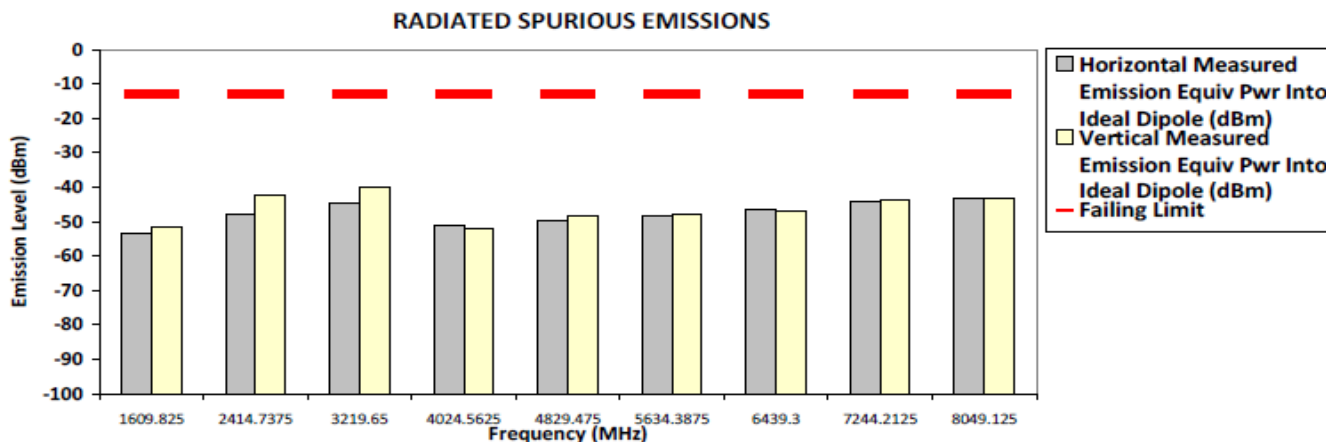
Passed Results	Marginal Results	Failed Results
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Motorola Solutions.

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 **



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:

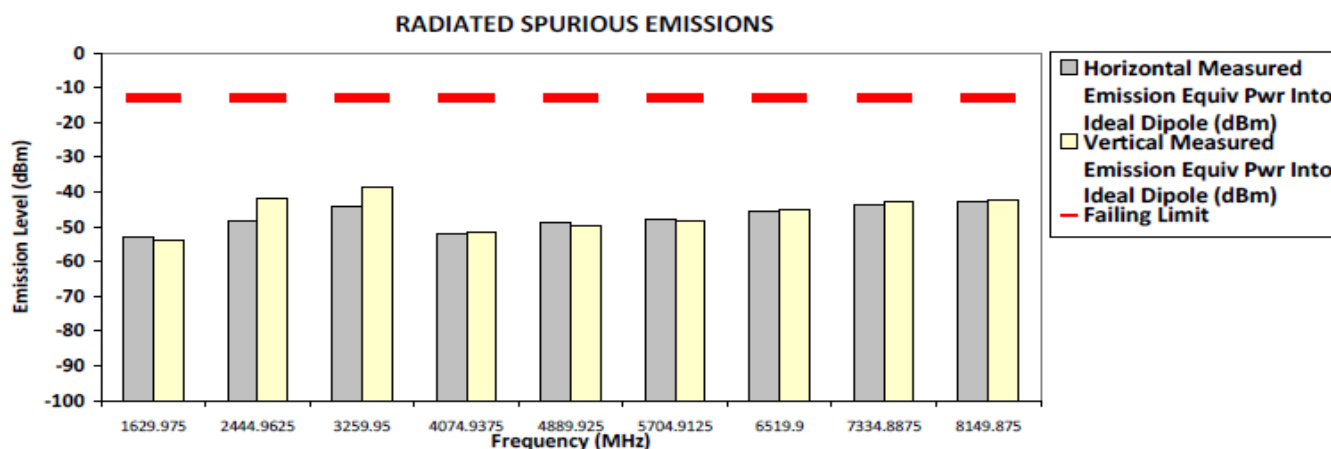
Passed Results	Marginal Results	Failed Results
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Motorola Solutions.

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 **



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:

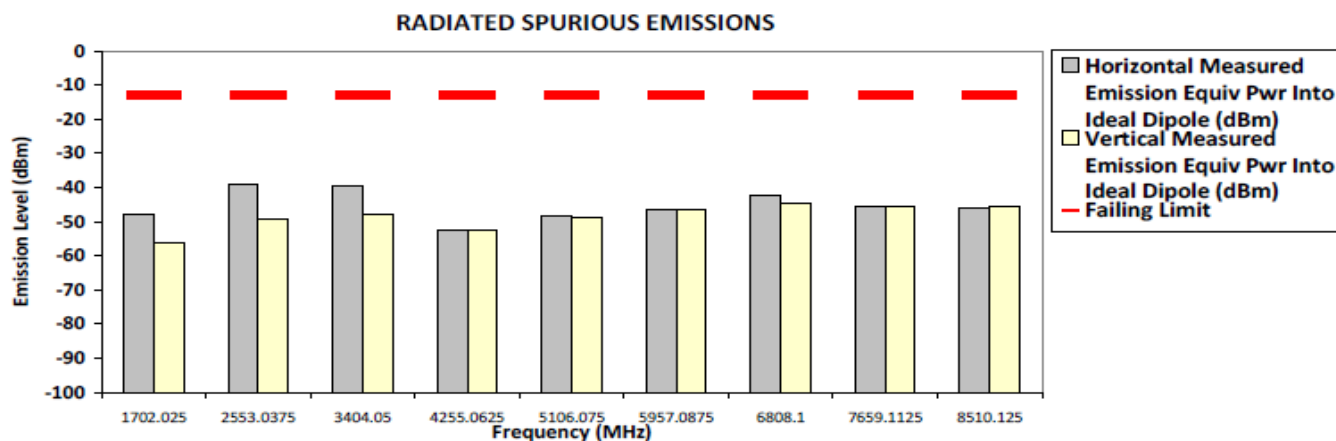
Passed Results	Marginal Results	Failed Results
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Motorola Solutions.

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 **



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:

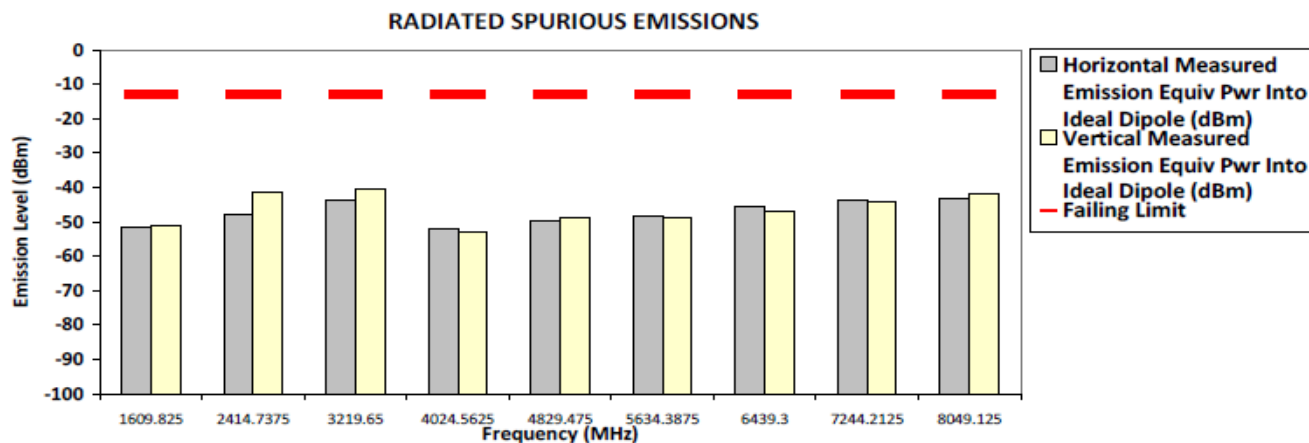
Passed Results	Marginal Results	Failed Results
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Motorola Solutions.

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 **



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:

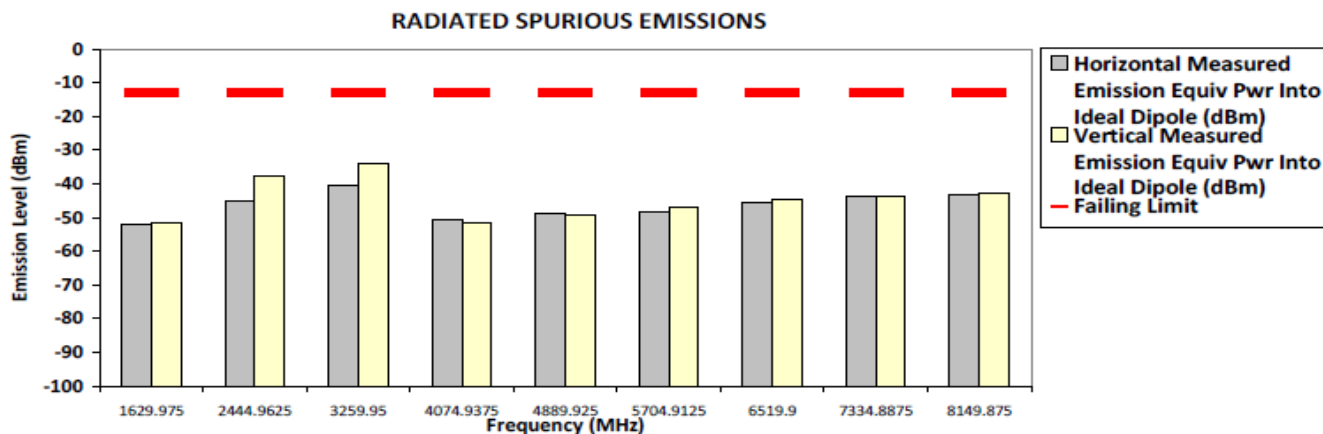
Passed Results	Marginal Results	Failed Results
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Motorola Solutions.

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 **



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:

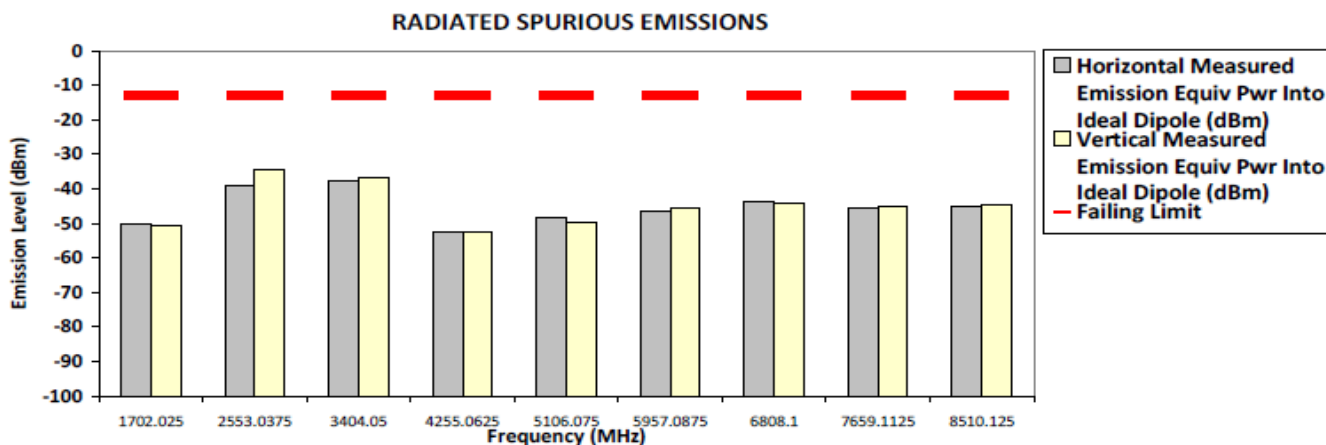
Passed Results	Marginal Results	Failed Results
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Motorola Solutions.

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 **



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

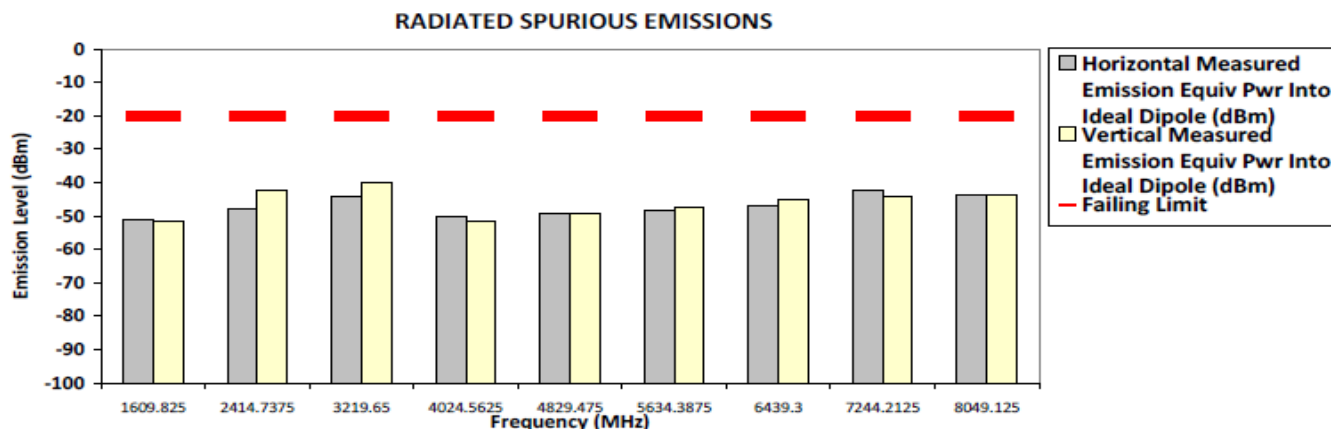
Remarks: Passed Results Marginal Results Failed Results

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 **



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.

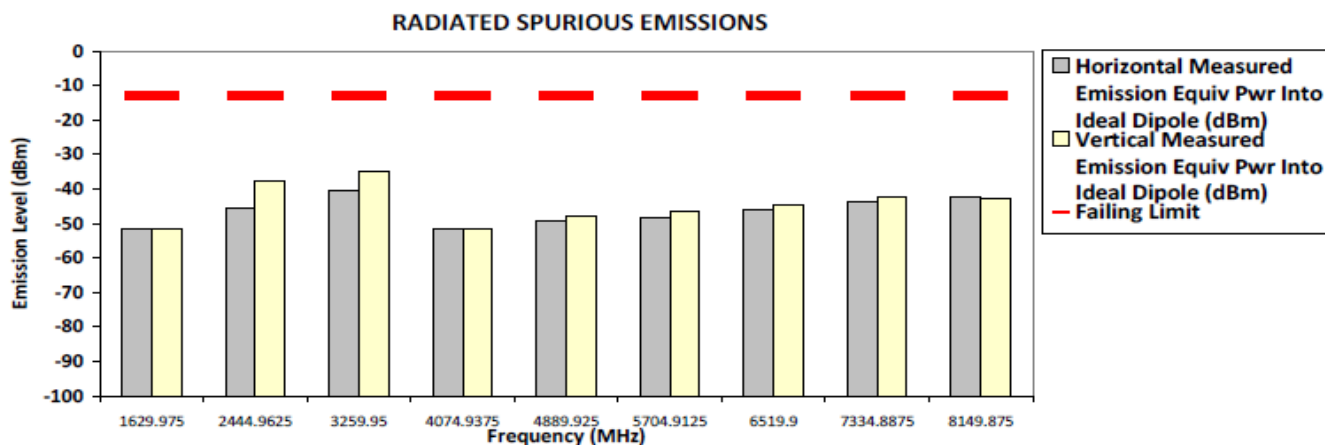
*Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported
 Temp(Deg): 23.4 Hum(%RH): 70.1

System MU: 5.01 dB

Remarks:

Passed Results	Marginal Results	Failed Results
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814.987500 MHz

[illegible]

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
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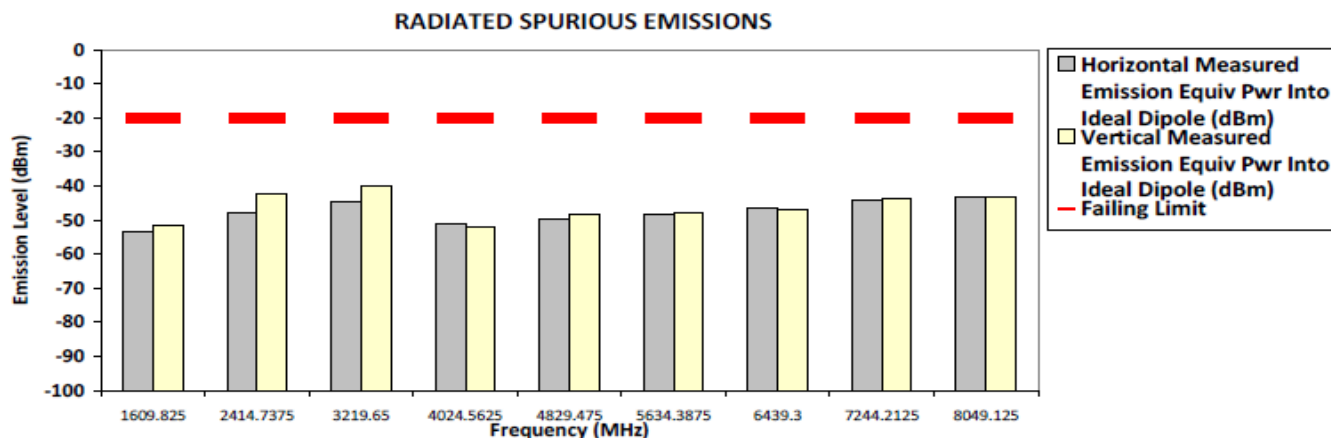
42,000 Watt(s) /Max Power

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 **



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:

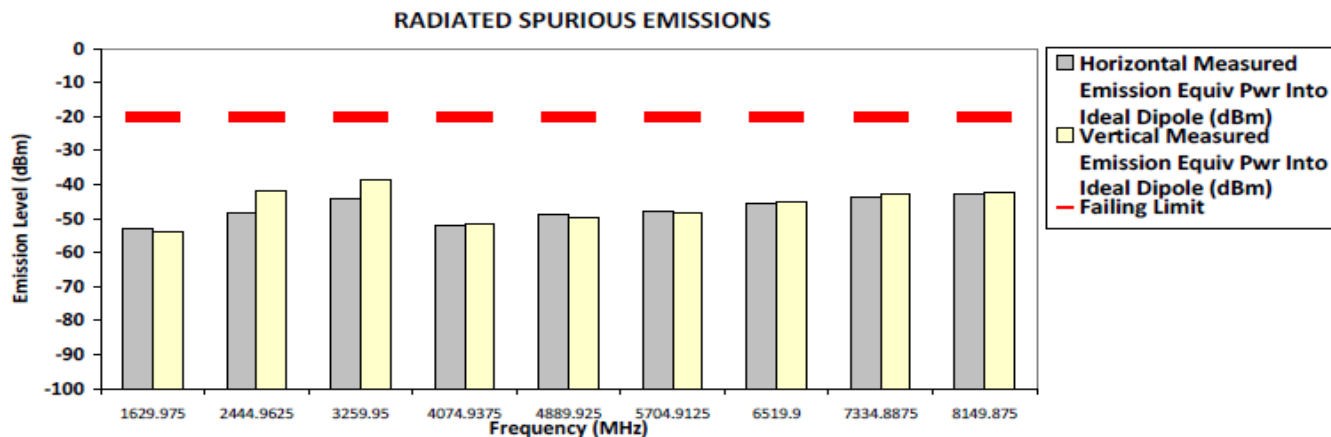
Passed Results	Marginal Results	Failed Results
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Motorola Solutions.

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
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 **



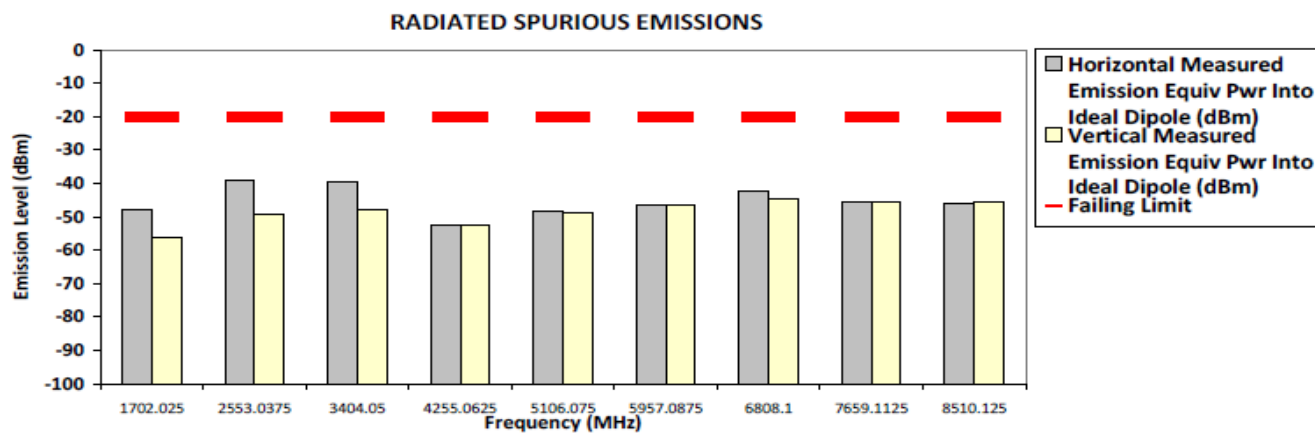
The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.
 Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman Sun, Nov 11, 2018

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

851.012500 MHz

[illegible]

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

Tue, Jul 24, 2018

*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:

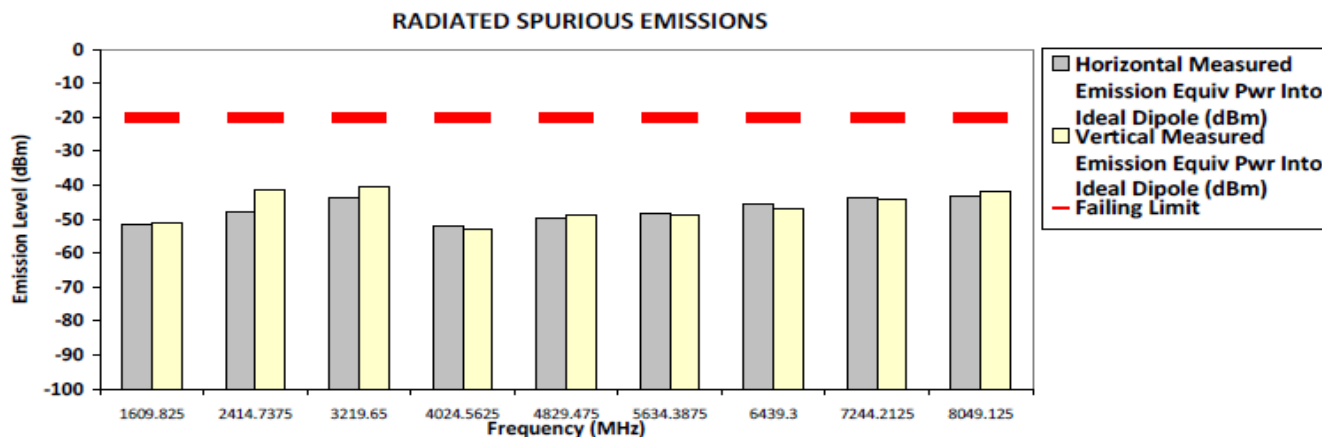
Passed Results	Marginal Results	Failed Results
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Motorola Solutions.

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 **



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:

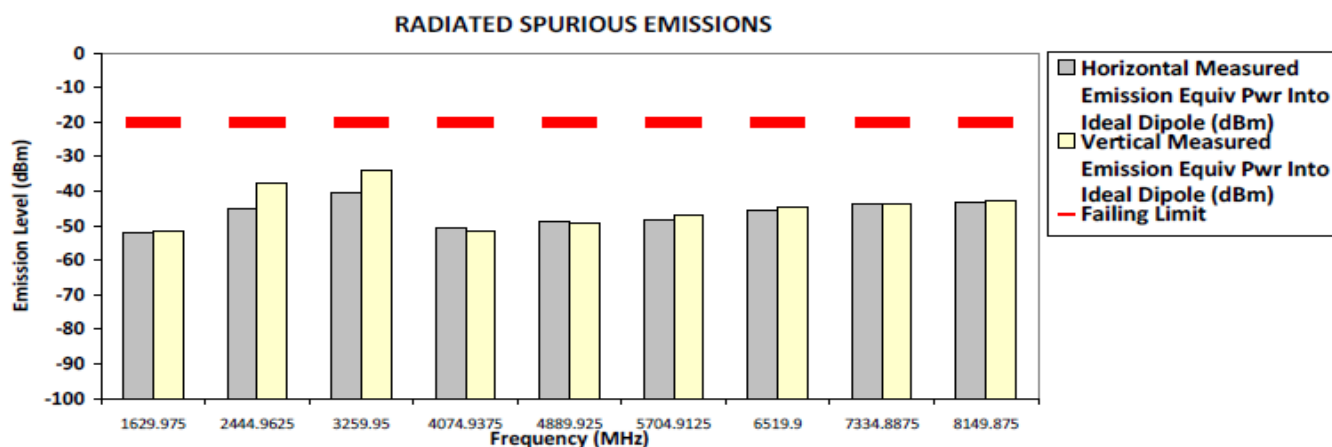
Passed Results	Marginal Results	Failed Results
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Motorola Solutions.

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 **



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

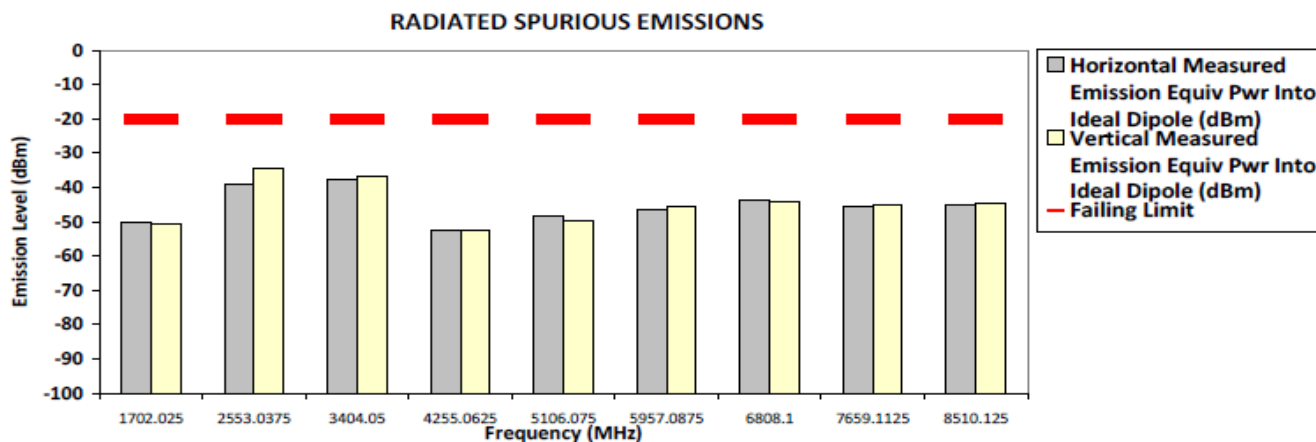
Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

*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

851.012500 MHz

[illegible]

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
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6.0.4. Test Limit

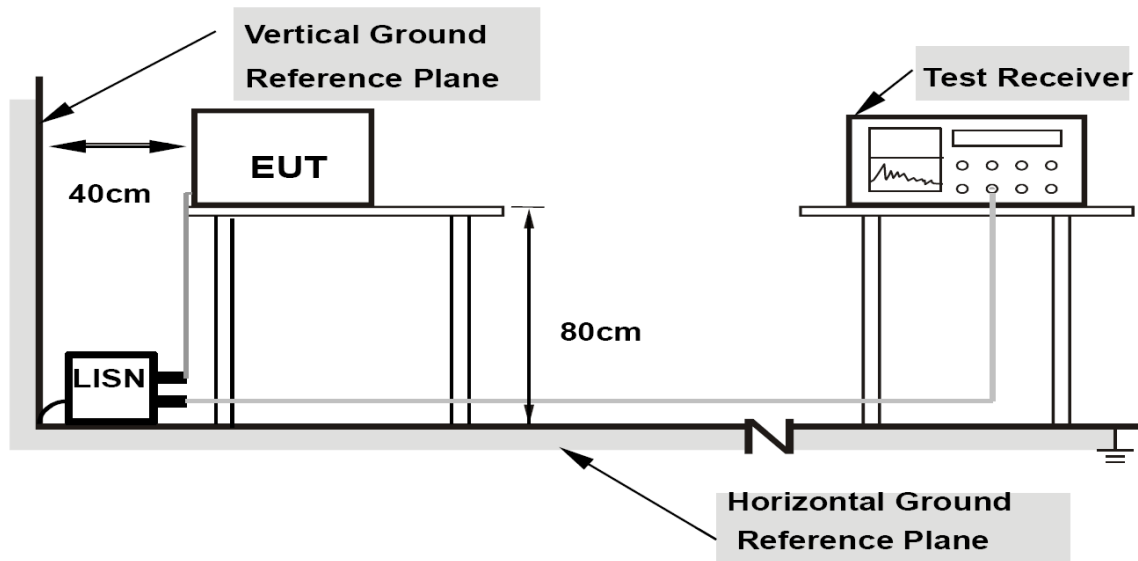
Table below summarized the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least

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**

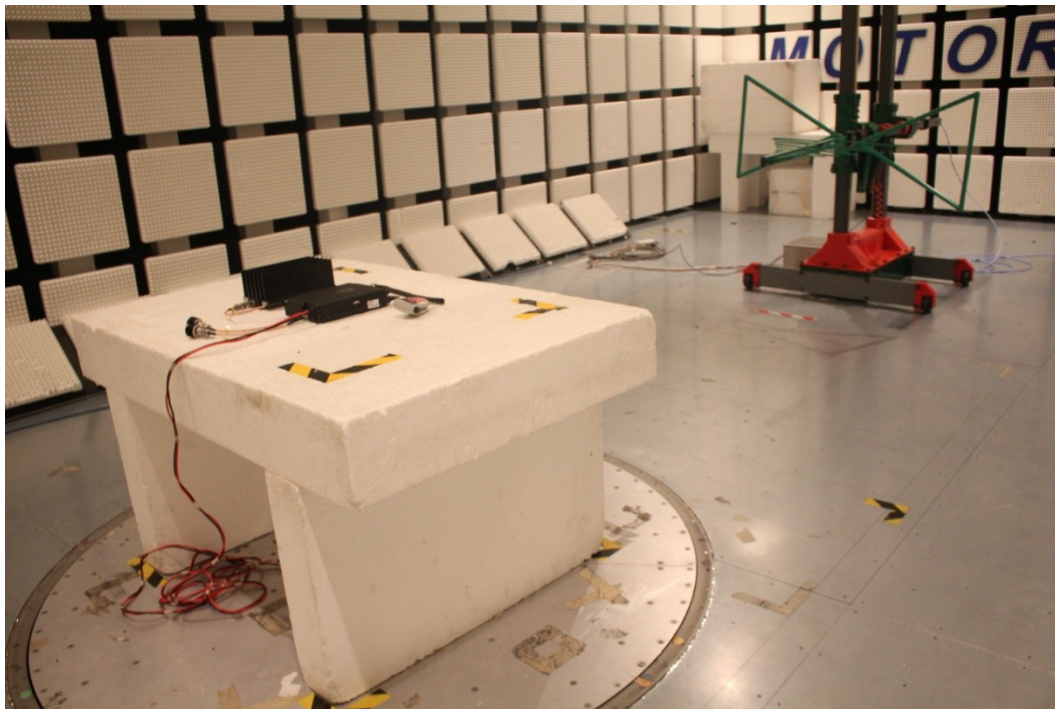
Frequency range MHz	Limits dB(μV)	
	Quasi-peak	Average
0,15 to 0,50	79	66
0,50 to 30	73	60
NOTE The lower limit shall apply at the transition frequency.		

**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.		
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 ~