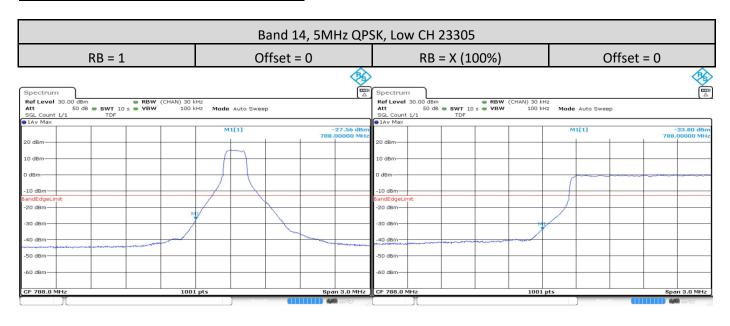


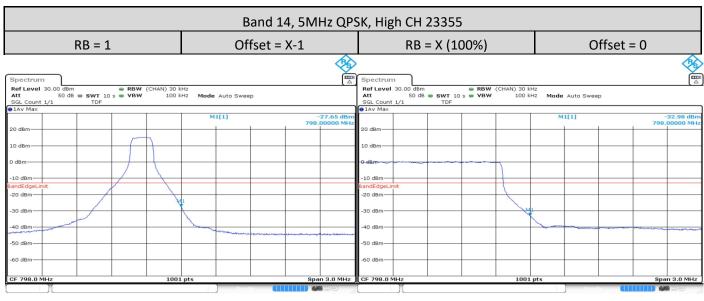
Report Template Document Number : FCD-0087
Report Template Revision Number : Rev. E

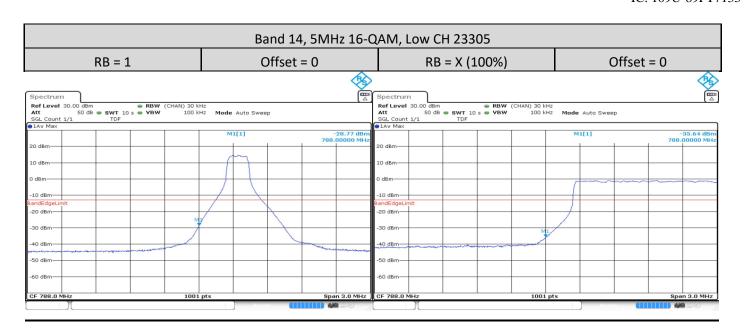
Report Template Revision Number : Rev. E

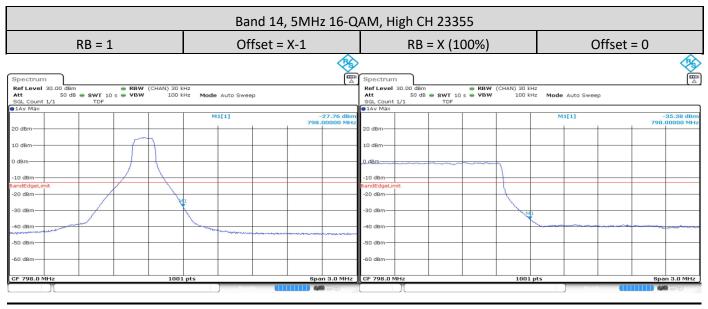
Report ID: 18058-RF-00086
FCC ID: AZ489FT7133
IC: 109U-89FT7133

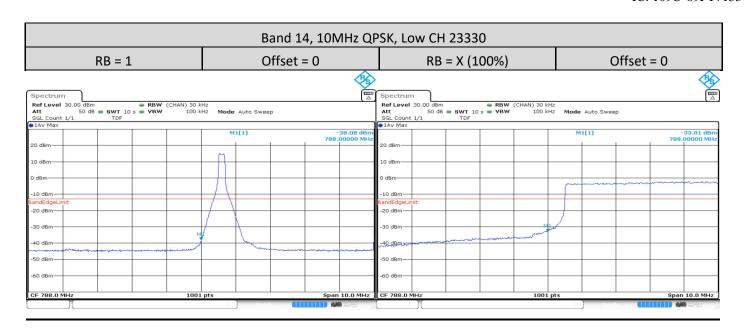
Band Edge Conducted Spurious Emission

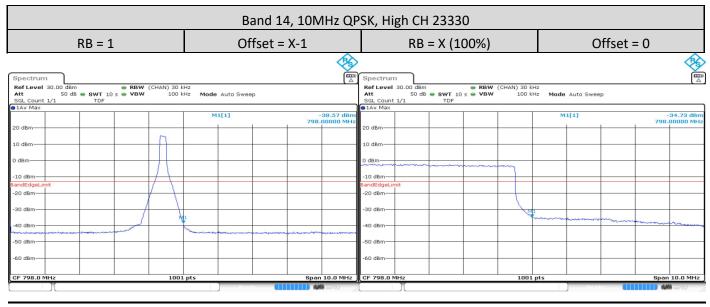


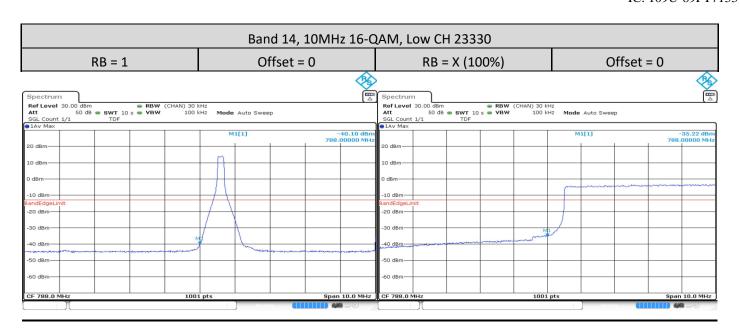


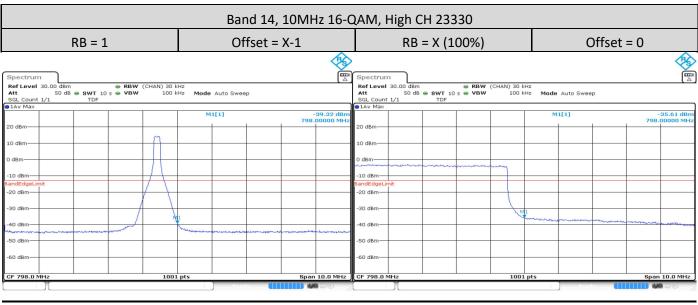










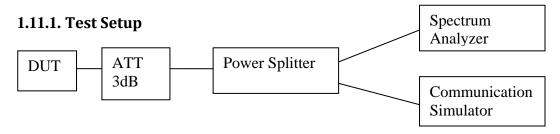


Report Template Document Number : FCD-0087
Report Template Revision Number : Rev. E

Report Template Revision Number : Rev. E

FCC ID: AZ489FT7133
IC: 109U-89FT7133

1.11. Conducted Spurious Emission



- 1) The DUT transmitter output port was connected to communication simulator with above setup.
- 2) Path loss for the measurement included.
- 3) Set DUT to transmit maximum power through communication simulator.
- 4) Spectrum Analyzer setting, RBW = 1 MHz, VBW = 3*RBW.
- 5) The spurious emission of lowest, middle and highest channels with the highest RF powers were measured.
- 6) Record the maximum trace plot into the test report.

1.11.2. Test Limit

- (e) For operations in the 758-768 MHz and the 788-798 MHz bands, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:
- (1) On all frequencies between 769-775 MHz and 799-805 MHz, by a factor not less than $76 + 10 \log (P) dB$ in a 6.25 kHz band segment, for base and fixed stations.
- (2) On all frequencies between 769-775 MHz and 799-805 MHz, by a factor not less than $65 + 10 \log (P) dB$ in a 6.25 kHz band segment, for mobile and portable stations.
- (3) On any frequency between 775-788 MHz, above 805 MHz, and below 758 MHz, by at least 43 + 10 log (P) dB.
- (4) Compliance with the provisions of paragraphs (e)(1) and (2) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment.
- (5) Compliance with the provisions of paragraph (e)(3) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of 30 kHz may be employed.

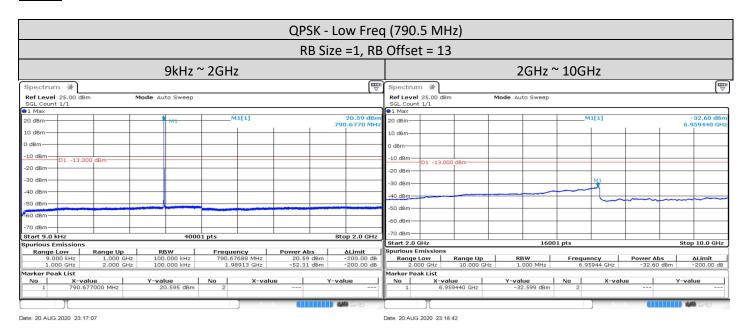
Report Template Document Number : FCD-0087
Report Template Revision Number : Rev. E

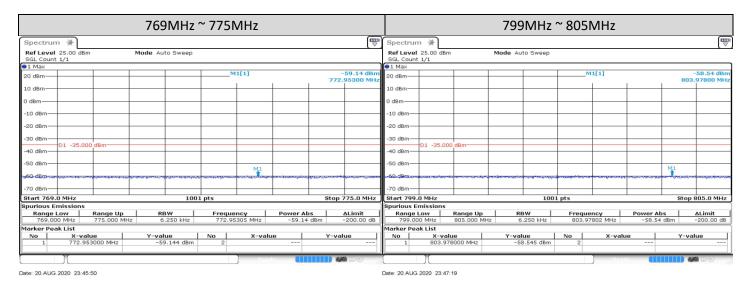
Report Template Revision Number : Rev. E

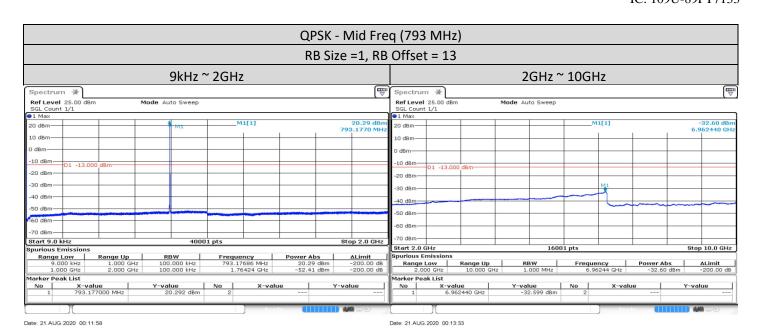
FCC ID: AZ489FT7133
IC: 109U-89FT7133

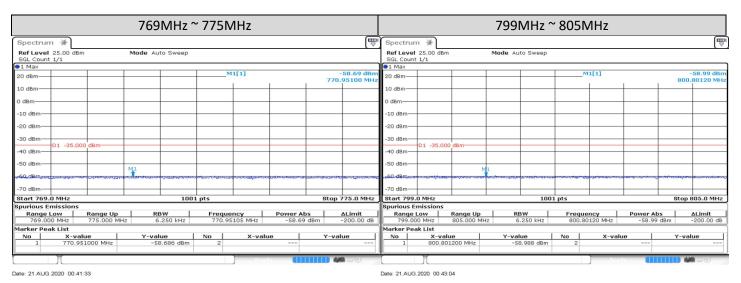
1.11.3. Conducted Spurious Emission - LTE Band 14 (788-798MHz)

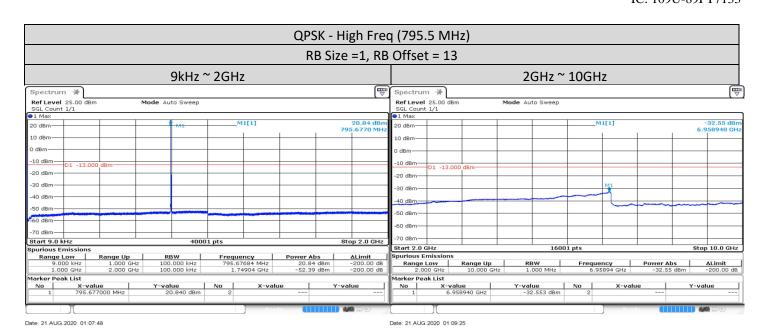
5MHz

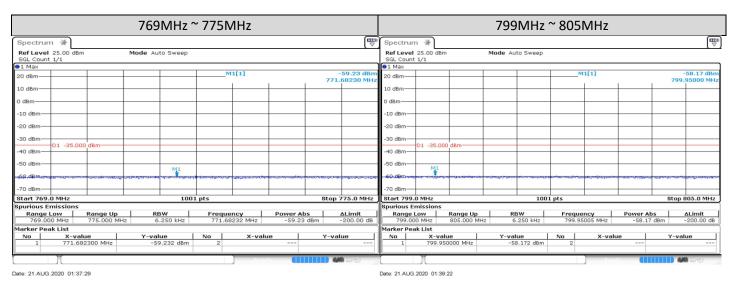










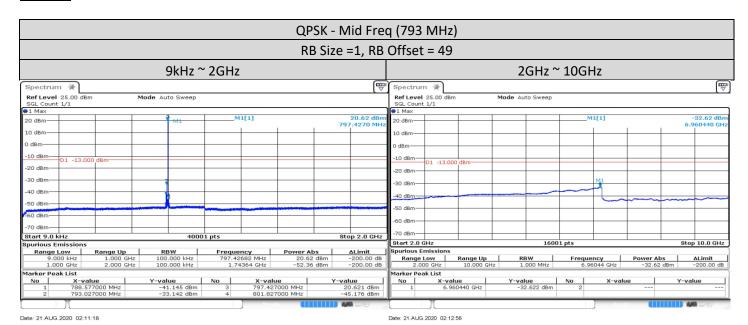


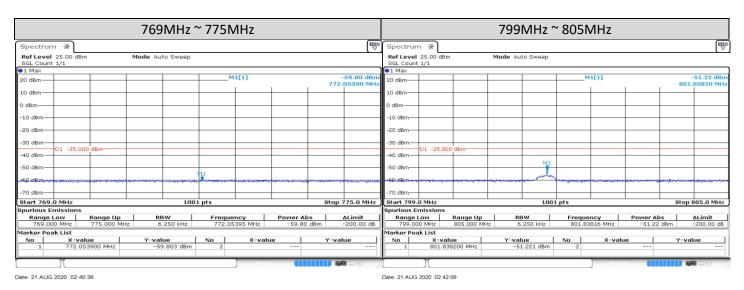
Report Template Document Number : FCD-0087
Report Template Revision Number : Rev. E

Report Template Revision Number : Rev. E

Report ID: 18058-RF-00086
FCC ID: AZ489FT7133
IC: 109U-89FT7133

10MHz





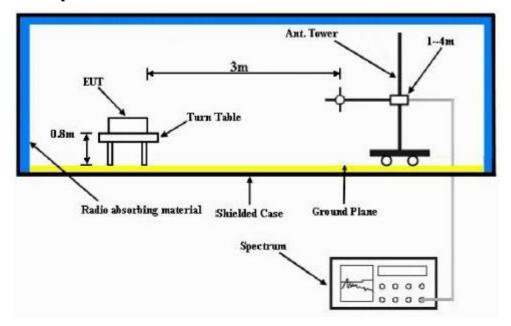
Report Template Document Number : FCD-0087
Report Template Revision Number : Rev. E

Report Template Revision Number : Rev. E

FCC ID: AZ489FT7133
IC: 109U-89FT7133

1.12. Radiated Spurious Emission

1.12.1. Test Setup



- 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.
- 2) In the semi-anechoic chamber, setup as illustrated above the EUT placed on the Turn Table at 0.8m height for below 1Ghz measurement and at 1.5m height for above 1GHz measurement, 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 EUT 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.

Report Template Document Number : FCD-0087
Report Template Revision Number : Rev. E

Report Template Revision Number : Rev. E

FCC ID: AZ489FT7133
IC: 109U-89FT7133

1.12.2. Test Limit

(e) For operations in the 758-768 MHz and the 788-798 MHz bands, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:

- (1) On all frequencies between 769-775 MHz and 799-805 MHz, by a factor not less than 76 + 10 \log (P) dB in a 6.25 kHz band segment, for base and fixed stations.
- (2) On all frequencies between 769-775 MHz and 799-805 MHz, by a factor not less than $65 + 10 \log (P) dB$ in a 6.25 kHz band segment, for mobile and portable stations.
- (3) On any frequency between 775-788 MHz, above 805 MHz, and below 758 MHz, by at least 43 + 10 log (P) dB.
- (4) Compliance with the provisions of paragraphs (e)(1) and (2) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment.
- (5) Compliance with the provisions of paragraph (e)(3) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of 30 kHz may be employed.

Report Template Document Number: FCD-0087 Report ID: 18058-RF-00086 FCC ID: AZ489FT7133 Report Template Revision Number: Rev. E

IC: 109U-89FT7133

1.12.3. Radiated Spurious Emission - LTE Band 14 (788-798MHz)

SAC Transmitter Radiated Emission:

Model Number: AAH90ZDU9RH1AN S/N: 734TWP0308 SR:18058-EMC-00054

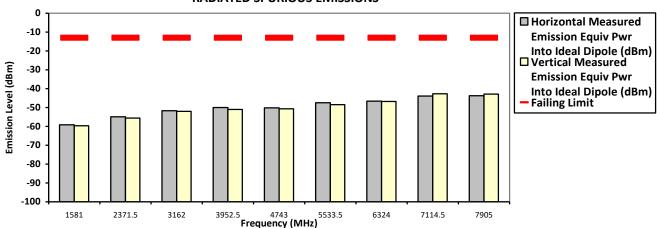
Battery Part No: PMNN4804A Accy Part No: AN000348A01

Test Mode: TX LTE (Band 14) X-Plane

790.500000 MHz (Low) Bandwidth 5MHz 0.252 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)
1581.0000	-13.0000	-59.2369 **	-59.5825 **
2371.5000	-13.0000	-54.9835 **	-55.6703 **
3162.0000	-13.0000	-51.6220 **	-51.9755 **
3952.5000	-13.0000	-50.0214 **	-51.0358 **
4743.0000	-13.0000	-50.1759 **	-50.7438 **
5533.5000	-13.0000	-47.4451 **	-48.4147 **
6324.0000	-13.0000	-46.6151 **	-46.7356 **
7114.5000	-13.0000	-43.8224 **	-42.7745 **
7905.0000	-13.0000	-43.7239 **	-42.9511 **

RADIATED SPURIOUS EMISSIONS



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: Qawiman&Nazrin Thu, 10 Sep, 2020

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): 23.9 Hum(%RH): 68.7

System MU: 4.03 dB **Marginal Results Failed Results** Remarks: Passed Results

Report Template Document Number : FCD-0087
Report Template Revision Number : Rev. E

Report Template Revision Number : Rev. E

Report ID: 18058-RF-00086
FCC ID: AZ489FT7133

IC: 109U-89FT7133

SAC Transmitter Radiated Emission:

Model Number: AAH90ZDU9RH1AN S/N: 734TWP0308 SR:18058-EMC-00054

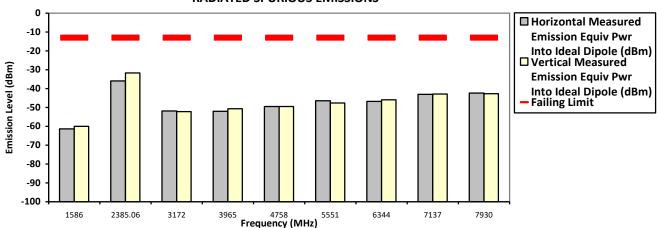
Battery Part No: PMNN4804A Accy Part No: AN000348A01

Test Mode: TX LTE (Band 14) X-Plane

793.000000 MHz (Mid) Bandwidth 5MHz 0.252 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)
1586.0000	-13.0000	-61.3751 **	-59.9374 **
2385.0600	-13.0000	-35.8500 *	-31.6300
3172.0000	-13.0000	-51.9091 **	-52.2434 **
3965.0000	-13.0000	-52.1060 **	-50.6458 **
4758.0000	-13.0000	-49.4892 **	-49.4187 **
5551.0000	-13.0000	-46.4818 **	-47.6205 **
6344.0000	-13.0000	-46.7009 **	-45.9138 **
7137.0000	-13.0000	-43.0419 **	-42.9251 **
7930.0000	-13.0000	-42.3963 **	-42.6887 **

RADIATED SPURIOUS EMISSIONS



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: Qawiman&Nazrin

Thu, 10 Sep, 2020

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): 23.9 Hum(%RH): 68.7

System MU: 4.03 dB

Remarks: Passed Results Marginal Results Failed Results

Report ID: 18058-RF-00086 FCC ID: AZ489FT7133 IC: 109U-89FT7133

SAC Transmitter Radiated Emission:

S/N: 734TWP0308 Model Number: AAH90ZDU9RH1AN SR:18058-EMC-00054

Battery Part No: PMNN4804A

Accy Part No: AN000348A01 Test Mode: TX LTE (Band 14) X-Plane

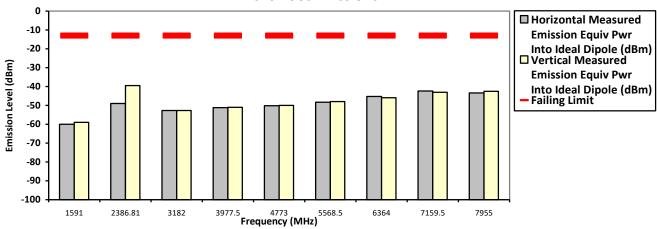
795.500000 MHz (High)

Bandwidth 5MHz

0.252 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)
1591.0000	-13.0000	-60.0517 **	-59.0232 **
2386.8100	-13.0000	-49.0300 *	-39.5600 *
3182.0000	-13.0000	-52.7644 **	-52.6836 **
3977.5000	-13.0000	-51.1981 **	-51.0050 **
4773.0000	-13.0000	-50.0866 **	-50.0704 **
5568.5000	-13.0000	-48.2222 **	-47.8865 **
6364.0000	-13.0000	-45.2794 **	-45.8816 **
7159.5000	-13.0000	-42.2987 **	-43.1257 **
7955.0000	-13.0000	-43.4457 **	-42.4940 **

RADIATED SPURIOUS EMISSIONS



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: Qawiman&Nazrin Thu, 10 Sep, 2020

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): 23.9 Hum(%RH): 68.7

System MU: 4.03 dB

Marginal Results Failed Results Remarks: Passed Results

Model Number: AAH90ZDU9RH1AN

Battery Part No: PMNN4804A

Report ID: 18058-RF-00086 FCC ID: AZ489FT7133 IC: 109U-89FT7133

SR:18058-EMC-00054

SAC Transmitter Radiated Emission: S/N: 734TWP0308 Accy Part No: AN000348A01

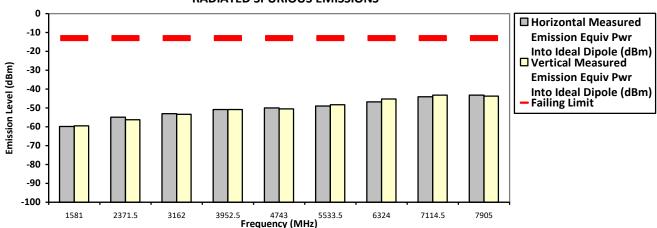
Test Mode: TX LTE (Band 14) Y-Plane
Bandwidth 5MHz

790.500000 MHz (Low)

0.252 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)
1581.0000	-13.0000	-59.7775 **	-59.5602 **
2371.5000	-13.0000	-54.9615 **	-56.2762 **
3162.0000	-13.0000	-52.9773 **	-53.4257 **
3952.5000	-13.0000	-50.8839 **	-50.8214 **
4743.0000	-13.0000	-49.9721 **	-50.5887 **
5533.5000	-13.0000	-48.9483 **	-48.3408 **
6324.0000	-13.0000	-46.7741 **	-45.3197 **
7114.5000	-13.0000	-44.0668 **	-43.3009 **
7905.0000	-13.0000	-43.2163 **	-43.8104 **

RADIATED SPURIOUS EMISSIONS



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: Qawiman&Nazrin

Thu, 10 Sep, 2020

System MU: 4.0	3 dB		 O ,	` ′
Remarks:	Passed Results	Marginal Results	Failed Resu	lts

Report ID: 18058-RF-00086 FCC ID: AZ489FT7133 IC: 109U-89FT7133

SAC Transmitter Radiated Emission:

Model Number: AAH90ZDU9RH1AN S/N: 734TWP0308 SR:18058-EMC-00054

Battery Part No: PMNN4804A Accy Part No: AN000348A01

Test Mode: TX LTE (Band 14) Y-Plane

793.000000 MHz (Mid) Bandwidth 5MHz 0.252 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)
1586.0000	-13.0000	-60.9134 **	-59.4791 **
2379.0000	-13.0000	-56.0889 **	-56.4026 **
3172.0000	-13.0000	-53.4086 **	-53.2511 **
3965.0000	-13.0000	-50.7755 **	-50.0830 **
4758.0000	-13.0000	-50.2230 **	-50.3693 **
5551.0000	-13.0000	-49.4151 **	-49.4627 **
6344.0000	-13.0000	-47.1857 **	-46.6062 **
7137.0000	-13.0000	-43.9281 **	-42.9552 **
7930.0000	-13.0000	-42.0968 **	-42.7724 **
1			

RADIATED SPURIOUS EMISSIONS 0 ■ Horizontal Measured -10 **Emission Equiv Pwr** -20 Into Ideal Dipole (dBm) ☐ Vertical Measured Emission Level (dBm) -30 **Emission Equiv Pwr** -40 Into Ideal Dipole (dBm) Failing Limit -50 -60 -70 -80 -90 -100

5551

6344

7137

7930

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: Qawiman&Nazrin

Thu, 10 Sep, 2020

4758 Frequency (MHz)

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): 23.9 Hum(%RH): 68.7

System MU: 4.03 dB

1586

2379

3172

3965

Remarks: Passed Results Marginal Results Failed Results

Report ID: 18058-RF-00086 FCC ID: AZ489FT7133 IC: 109U-89FT7133

SAC Transmitter Radiated Emission:

Model Number: AAH90ZDU9RH1AN S/N: 734TWP0308 SR:18058-EMC-00054

Battery Part No: PMNN4804A Accy Part No: AN000348A01

Test Mode: TX LTE (Band 14) Y-Plane

795.500000 MHz (High) Bandwidth 5MHz 0.252 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)
1591.0000	-13.0000	-60.4241 **	-60.5949 **
2386.8100	-13.0000	-47.8200 *	-39.9700 *
3182.0000	-13.0000	-53.1498 **	-51.7533 **
3977.5000	-13.0000	-50.1480 **	-50.1034 **
4773.0000	-13.0000	-49.6158 **	-49.2865 **
5568.5000	-13.0000	-47.4573 **	-48.5628 **
6364.0000	-13.0000	-47.1132 **	-46.0558 **
7159.5000	-13.0000	-43.1744 **	-43.0255 **
7955.0000	-13.0000	-42.6250 **	-42.9061 **

RADIATED SPURIOUS EMISSIONS 0 **□** Horizontal Measured -10 **Emission Equiv Pwr** Into Ideal Dipole (dBm) -20 ☐ Vertical Measured Emission Level (dBm) -30 **Emission Equiv Pwr** -40 Into Ideal Dipole (dBm) **Failing Limit** -50 -60 -70 -80 -90 -100 3977.5 4773 5568.5 **Frequency (MHz)** 1591 2386.81 3182 6364 7159.5

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: Qawiman&Nazrin

Thu, 10 Sep, 2020

System MU: 4.0	3 dB		 0,	`	
Remarks:	Passed Results	Marginal Results	Failed Res	ults	

Report ID: 18058-RF-00086 FCC ID: AZ489FT7133 IC: 109U-89FT7133

SAC Transmitter Radiated Emission:

Model Number: AAH90ZDU9RH1AN S/N: 734TWP0308 SR:18058-EMC-00054

Battery Part No: PMNN4804A Accy Part No: AN000348A01

Test Mode: TX LTE (Band 14) Z-Plane

790.500000 MHz (Low) Bandwidth 5MHz 0.252 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)
1581.0000	-13.0000	-60.6318 **	-59.9259 **
2371.5000	-13.0000	-55.5850 **	-56.7137 **
3162.0000	-13.0000	-53.1559 **	-53.3378 **
3952.5000	-13.0000	-50.4173 **	-51.4490 **
4743.0000	-13.0000	-50.4904 **	-50.9399 **
5533.5000	-13.0000	-47.5301 **	-48.5283 **
6324.0000	-13.0000	-45.3137 **	-46.3044 **
7114.5000	-13.0000	-43.4450 **	-43.3811 **
7905.0000	-13.0000	-42.9853 **	-41.6486 **

RADIATED SPURIOUS EMISSIONS 0 **□** Horizontal Measured -10 **Emission Equiv Pwr** Into Ideal Dipole (dBm) -20 ☐ Vertical Measured Emission Level (dBm) -30 **Emission Equiv Pwr** -40 Into Ideal Dipole (dBm) **Failing Limit** -50 -60 -70 -80 -90 -100 ^{3952.5} Frequency (MHz) ^{5533.5} 1581 2371.5 7114.5

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: Qawiman&Nazrin

Thu, 10 Sep, 2020

System MU: 4.03 dB	
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Remarks:	Passed Results	Marginal Results	Failed Results
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Report ID: 18058-RF-00086 FCC ID: AZ489FT7133 IC: 109U-89FT7133

SAC Transmitter Radiated Emission:

Model Number: AAH90ZDU9RH1AN S/N: 734TWP0308 SR:18058-EMC-00054

Battery Part No: PMNN4804A Accy Part No: AN000348A01

Test Mode: TX LTE (Band 14) Z-Plane

793.000000 MHz (Mid) Bandwidth 5MHz 0.252 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)
1590.2500	-13.0000	-52.3600 *	-51.7700 *
2385.4100	-13.0000	-39.4900 *	-43.8500 *
3172.0000	-13.0000	-53.4447 **	-53.5037 **
3965.0000	-13.0000	-52.0831 **	-51.1992 **
4758.0000	-13.0000	-49.3083 **	-49.8709 **
5551.0000	-13.0000	-49.4930 **	-48.2017 **
6344.0000	-13.0000	-46.4876 **	-46.6718 **
7137.0000	-13.0000	-44.0218 **	-41.7423 **
7930.0000	-13.0000	-44.3501 **	-43.2430 **

RADIATED SPURIOUS EMISSIONS 0 **□** Horizontal Measured -10 **Emission Equiv Pwr** Into Ideal Dipole (dBm) -20 ☐ Vertical Measured Emission Level (dBm) -30 **Emission Equiv Pwr** -40 Into Ideal Dipole (dBm) **Failing Limit** -50 -60 -70 -80 -90 -100 3172 3965 4758 Frequency (MHz) 1590.25 2379 2385.41

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: Qawiman&Nazrin

Thu, 10 Sep, 2020

System MU: 4.03 dB				0,	`	
Remarks:	Passed Results	Marginal Results		Failed Res	ults	

Model Number: AAH90ZDU9RH1AN

Report ID: 18058-RF-00086 FCC ID: AZ489FT7133 IC: 109U-89FT7133

SR:18058-EMC-00054

SAC Transmitter Radiated Emission: S/N: 734TWP0308 Accy Part No: AN000348A01

Test Mode: TX LTE (Band 14) Z-Plane Bandwidth 5MHz

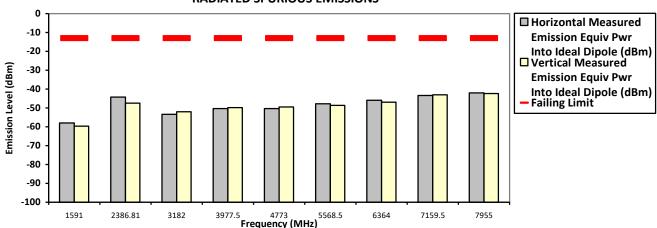
795.500000 MHz (High)

Battery Part No: PMNN4804A

0.252 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)
1591.0000	-13.0000	-58.0410 **	-59.6036 **
2386.8100	-13.0000	-44.2000 *	-47.4700 *
3182.0000	-13.0000	-53.3392 **	-52.0120 **
3977.5000	-13.0000	-50.2604 **	-49.8452 **
4773.0000	-13.0000	-50.3501 **	-49.4248 **
5568.5000	-13.0000	-47.7324 **	-48.6819 **
6364.0000	-13.0000	-45.9279 **	-47.0206 **
7159.5000	-13.0000	-43.3276 **	-43.0758 **
7955.0000	-13.0000	-41.9938 **	-42.3866 **

RADIATED SPURIOUS EMISSIONS



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: Qawiman&Nazrin

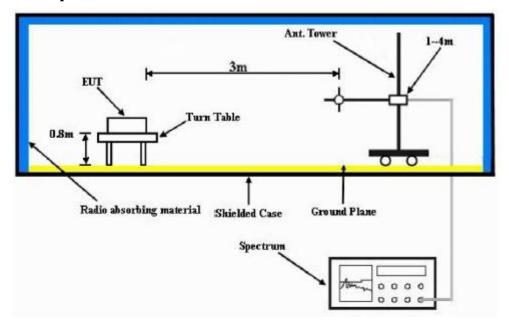
Thu, 10 Sep, 2020

System MU: 4.0	 O ,	`			
Remarks:	Passed Results	Marginal Results	Failed Re	sults	

Report ID: 18058-RF-00086 FCC ID: AZ489FT7133 IC: 109U-89FT7133

1.13. Effective Radiated Power (ERP)

1.13.1. Test Setup



- 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 RMS.
- 2) In the semi-anechoic chamber, setup as illustrated above the EUT placed on the Turn Table at 0.8m height for below 1Ghz measurement and at 1.5m height for above 1GHz measurement, 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 EUT 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) ERP = "Read Value" + Measured substitution value.

1.13.2. Test Limit

The maximum output power of the transmitter for mobile stations is 100 watts (20 dBw). Power is given in terms of effective radiated power (ERP).

1.13.3. Effective Radiated Power (ERP) - LTE Band 14 (788-798MHz)

Not Performed.

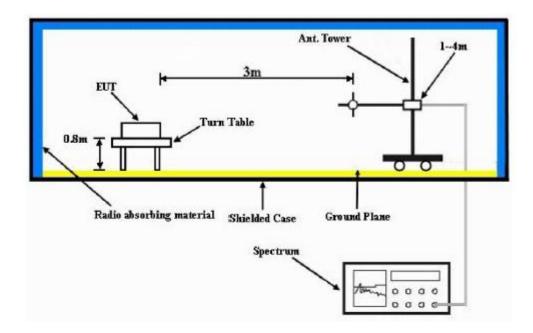
Report Template Document Number : FCD-0087
Report Template Revision Number : Rev. E

Report Template Revision Number : Rev. E

FCC ID: AZ489FT7133
IC: 109U-89FT7133

1.14. GNSS (EIRP for 1559 - 1610MHz)

1.14.1. Test Setup



- 1) The Resolution Bandwidth for Equivalent Isotropically Radiated Power (EIRP) below 1 GHz is 100 kHz with Video Bandwidth = 300 kHz and Resolution Bandwidth for EIRP above 1 GHz is 1 MHz with Video Bandwidth = 3 MHz. Detector Mode is RMS.
- 2) In the semi-anechoic chamber, setup as illustrated above the DUT placed on the 0.8m height of Turn Table, rotated the table 45 degree each interval 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 for each degree interval. The "Read Value" is the spectrum reading of 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) EIRP = "Read Value" + Measured substitution value + 2.15.

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FCC ID: AZ489FT7133

IC: 10011-80FT7133

IC: 109U-89FT7133

1.14.2. Test Limit

FCC: For operations in the 758-775 MHz and 788-805 MHz bands, all emissions including harmonics in the band 1559-1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.

ISED: The equivalent isotropically radiated power (e.i.r.p.) of all emissions, including harmonics in the band 1559-1610 MHz, shall not exceed -70 dBW/MHz for wideband emissions, and -80 dBW/kHz for discrete emissions of less than 700 Hz bandwidth.

1.14.3. GNSS (EIRP for 1599 - 1610MHz) - LTE Band 14 (788-798MHz)

EIRP in RNSS band (1.559GHz to 1.610GHz)

Channel Bandwidth: 5 MHz Modulation: QPSK (LTE B14)

Accessory: AN000348A01 Battery: PMNN4804A

Frequency Channel: 790.5000 MHz (Z-Plane)

Antenna Polarization	2Fc (MHz)	EIRP (dBm)	Limit (dBm)
Horizontal	1581.0000	-68.32	-40
Vertical	1581.0000	-68.06	-40

EIRP in RNSS band (1.559GHz to 1.610GHz)

S/N: 734TWP0308 Tx Power: 0.252 Watts

Channel Bandwidth: 5 MHz Modulation: QPSK (LTE B14)

Accessory: AN000348A01 Battery: PMNN4804A

Frequency Channel: 793.0000 MHz (Z-Plane)

Antenna Polarization	2Fc (MHz)	EIRP (dBm)	Limit (dBm)
Horizontal	1586.0000	-68.23	-40
Vertical	1586.0000	-68.14	-40

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EIRP in RNSS band (1.559GHz to 1.610GHz)

Channel Bandwidth: 5 MHz Modulation: QPSK (LTE B14)

Accessory: AN000348A01 Battery: PMNN4804A

Frequency Channel: 784.5000 MHz (Z-Plane)

Antenna Polarization	2Fc (MHz)	EIRP (dBm)	Limit (dBm)
Horizontal	1569.0000	-68.42	-40
Vertical	1569.0000	-68.25	-40

-- End of Test Report--