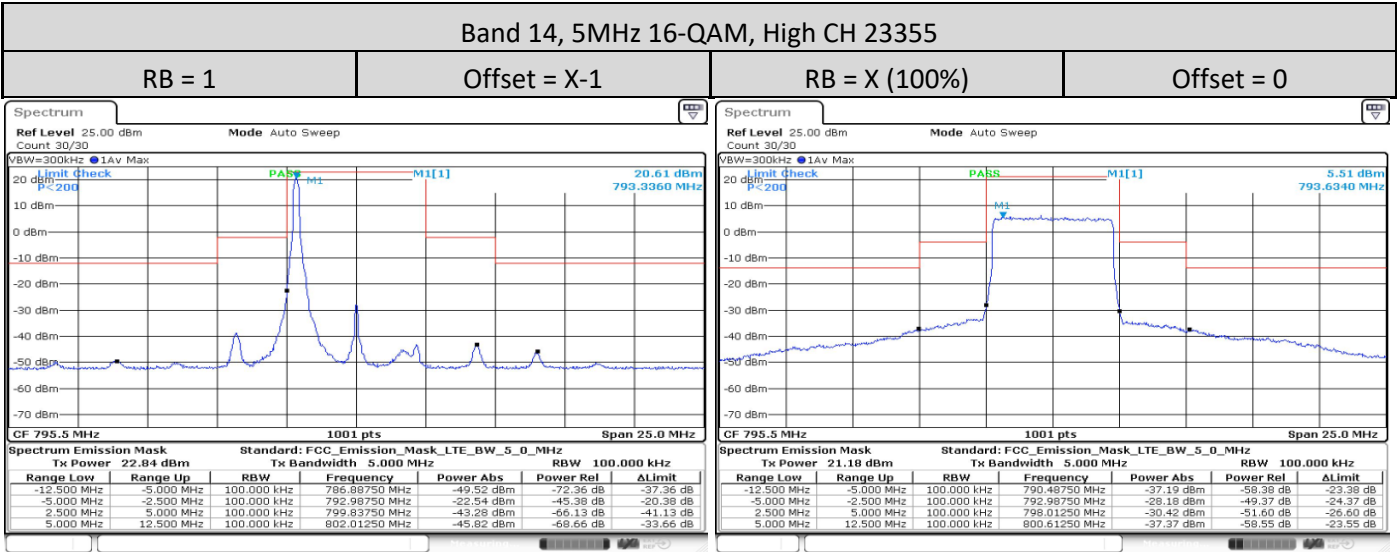
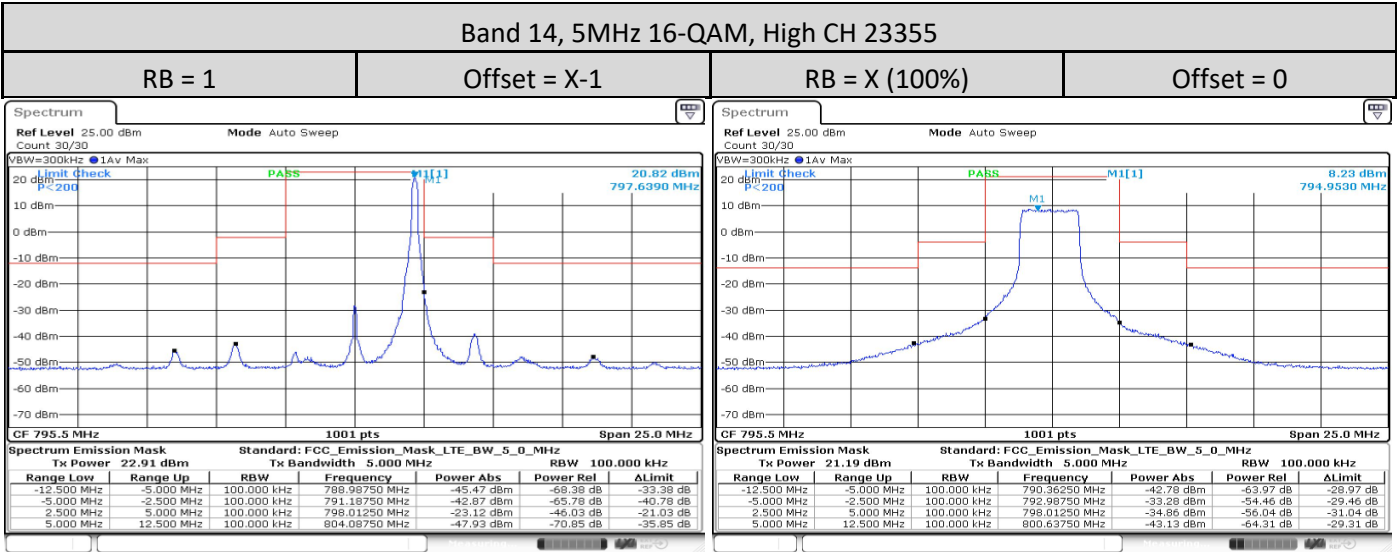




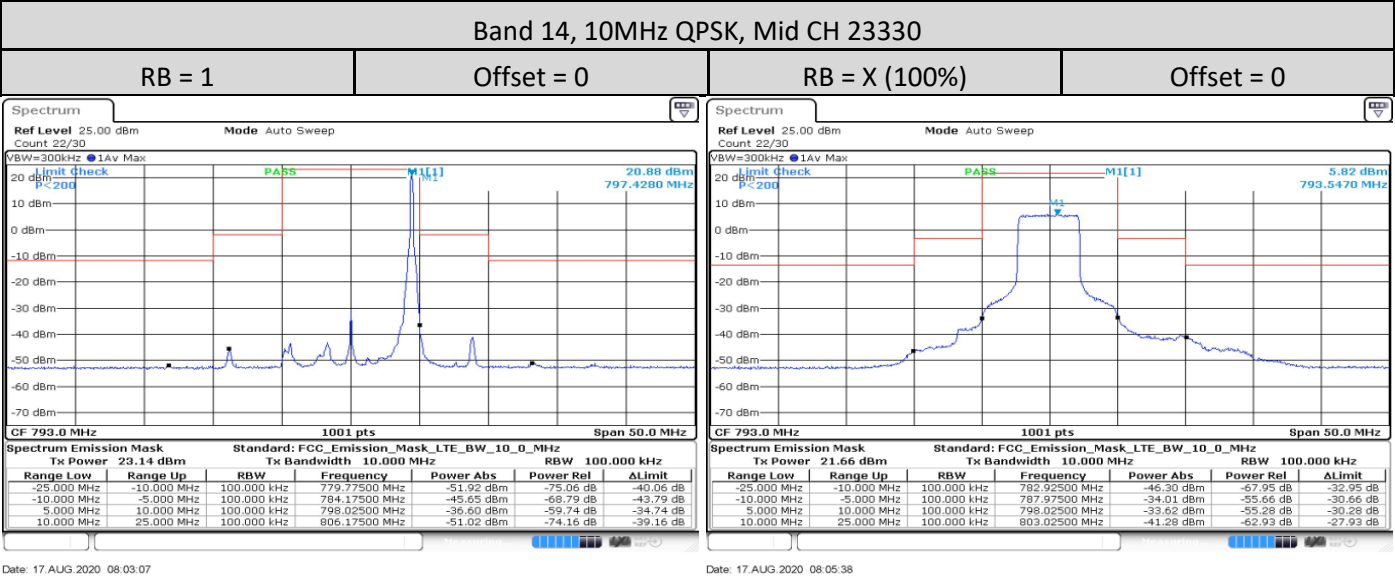
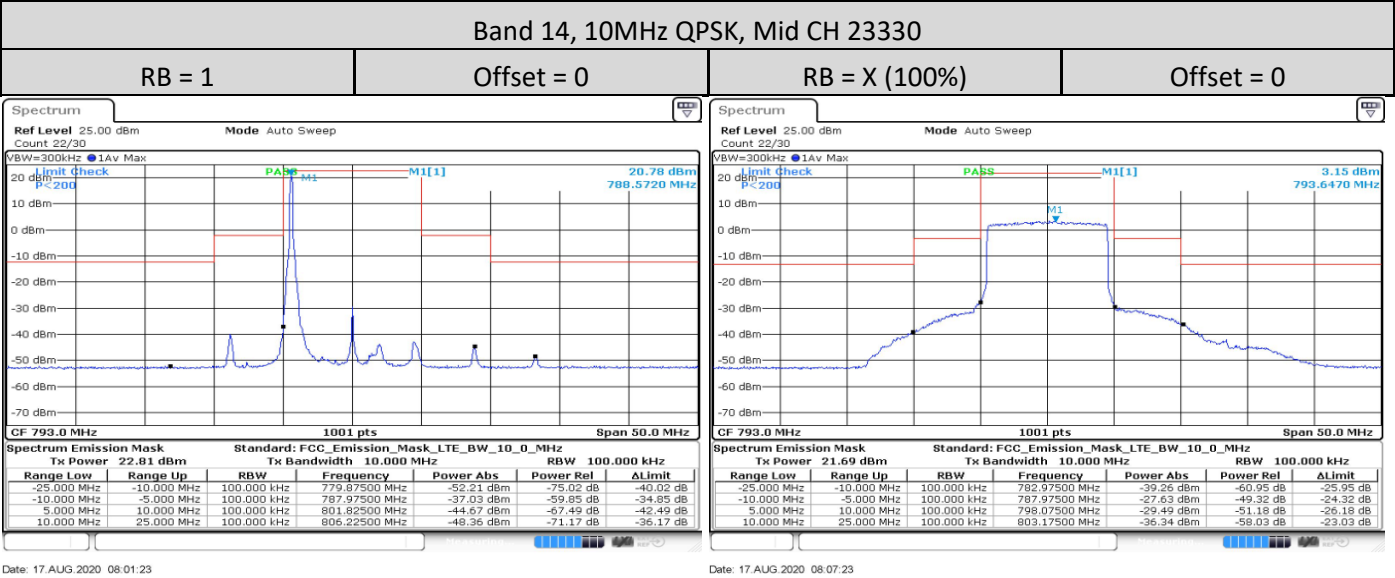
Date: 17.AUG.2020 07:55:01

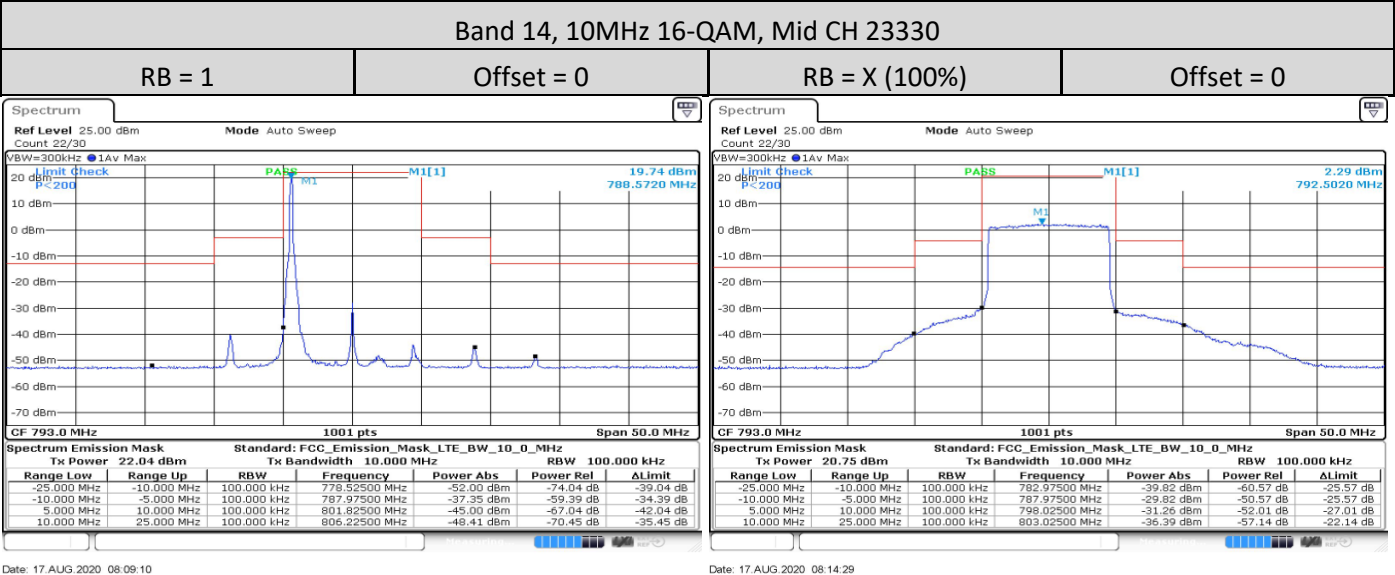
Date: 17.AUG.2020 07:59:32



Date: 17.AUG.2020 07:56:30

Date: 17.AUG.2020 07:58:02





Spectrum

Ref Level 25.00 dBm

Count 22/30

VBW=300kHz

Limit check

PA&S

M1[1]

2.29 dBm

792.5020 MHz

Mode Auto Sweep

1001 pts

Span 50.0 MHz

Spectrum Emission Mask

Tx Power 20.75 dBm

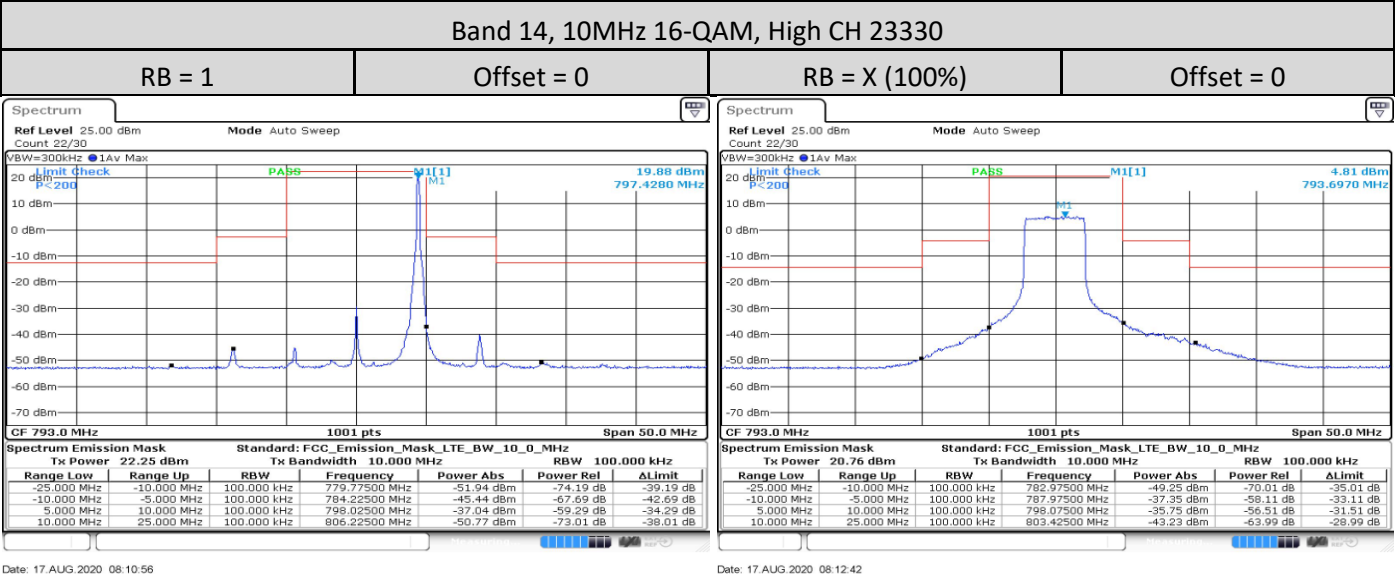
Standard: FCC_Emission_Mask_LTE_BW_10_0_MHz

Tx Bandwidth 10.000 MHz

RBW 100.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-25.000 MHz	-10.000 MHz	100.000 kHz	782.97500 MHz	-39.82 dBm	-60.57 dB	-25.57 dB
-10.000 MHz	-5.000 MHz	100.000 kHz	787.97500 MHz	-29.82 dBm	-50.57 dB	-25.57 dB
5.000 MHz	10.000 MHz	100.000 kHz	798.02500 MHz	-31.26 dBm	-52.01 dB	-27.01 dB
10.000 MHz	25.000 MHz	100.000 kHz	803.02500 MHz	-36.39 dBm	-57.14 dB	-22.14 dB

Date: 17.AUG.2020 08:14:29



Spectrum

Ref Level 25.00 dBm

Count 22/30

VBW=300kHz

Limit check

PA&S

M1[1]

4.81 dBm

793.6970 MHz

Mode Auto Sweep

1001 pts

Span 50.0 MHz

Spectrum Emission Mask

Tx Power 20.76 dBm

Standard: FCC_Emission_Mask_LTE_BW_10_0_MHz

Tx Bandwidth 10.000 MHz

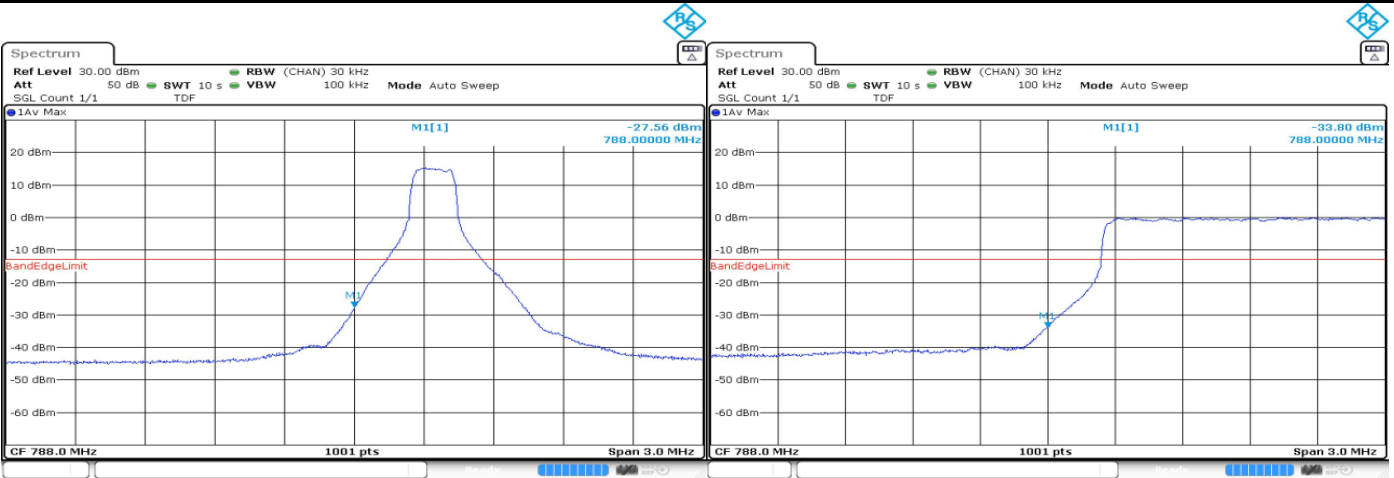
RBW 100.000 kHz

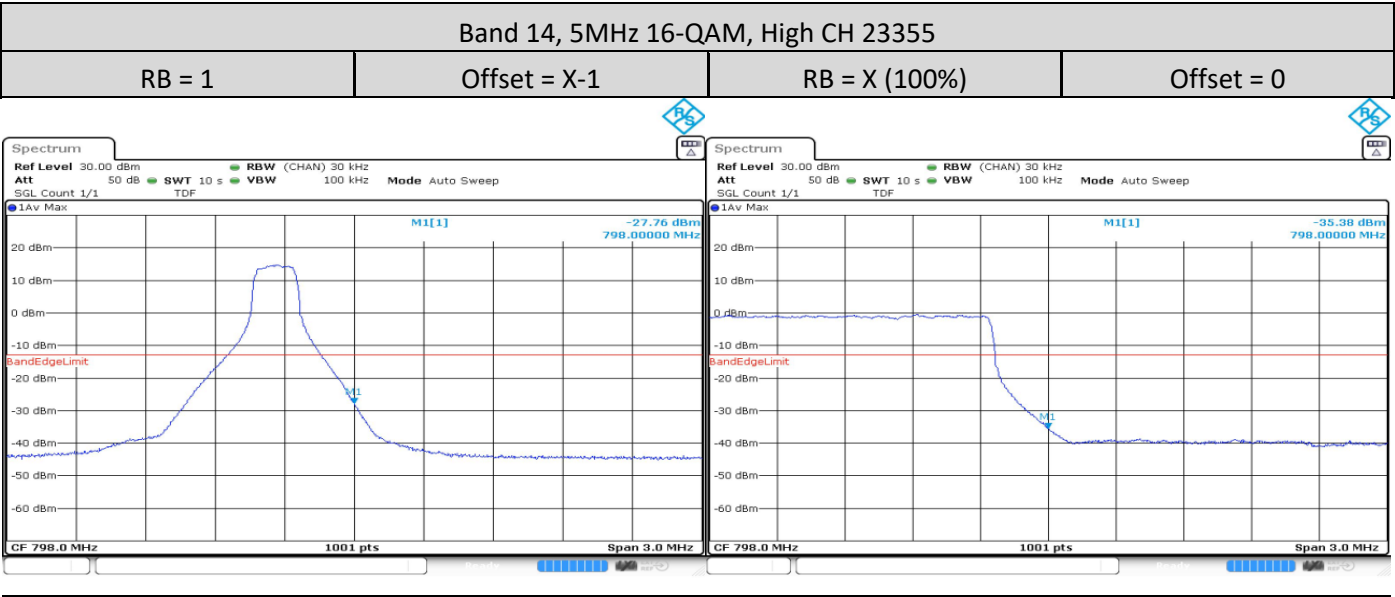
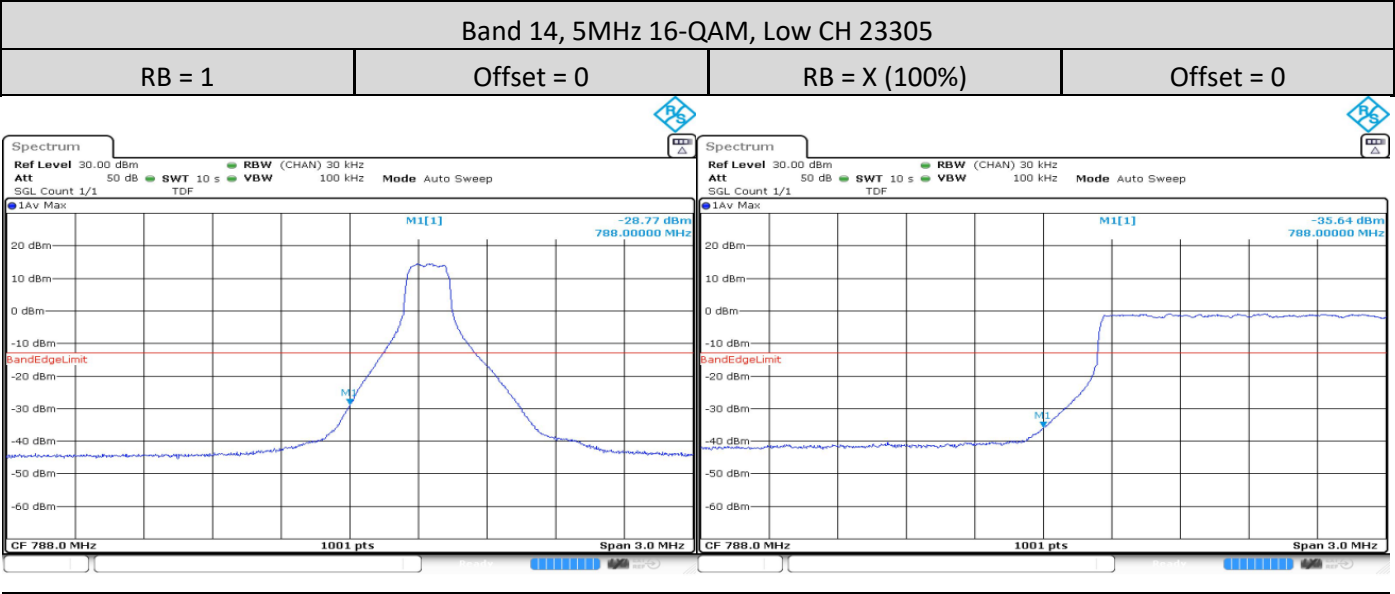
Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-25.000 MHz	-10.000 MHz	100.000 kHz	782.97500 MHz	-49.25 dBm	-70.01 dB	-35.01 dB
-10.000 MHz	-5.000 MHz	100.000 kHz	787.97500 MHz	-37.35 dBm	-58.11 dB	-33.11 dB
5.000 MHz	10.000 MHz	100.000 kHz	798.07500 MHz	-35.75 dBm	-56.51 dB	-31.51 dB
10.000 MHz	25.000 MHz	100.000 kHz	803.42500 MHz	-43.23 dBm	-63.99 dB	-28.99 dB

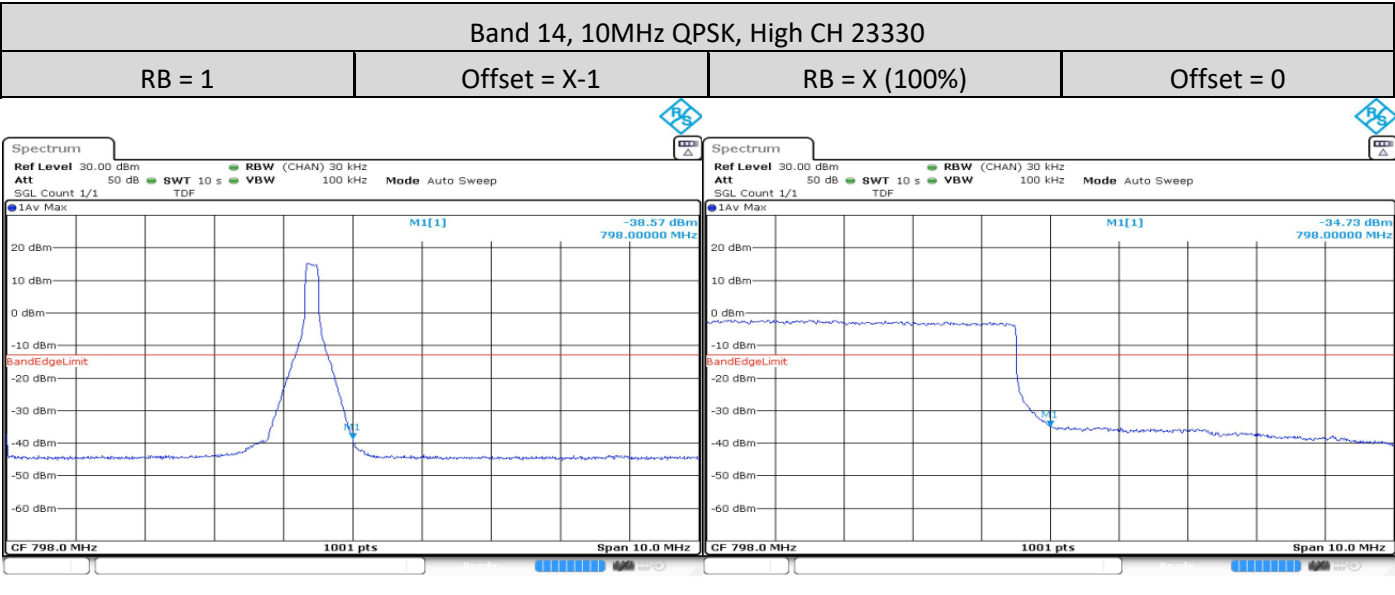
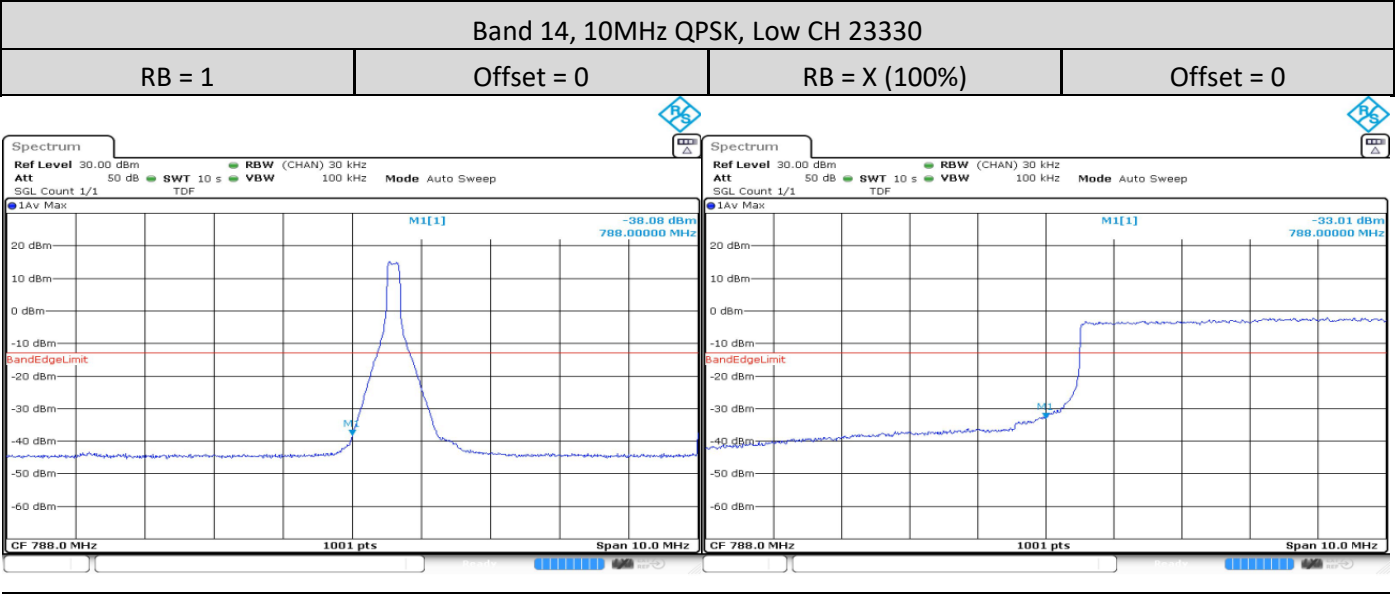
Date: 17.AUG.2020 08:12:42

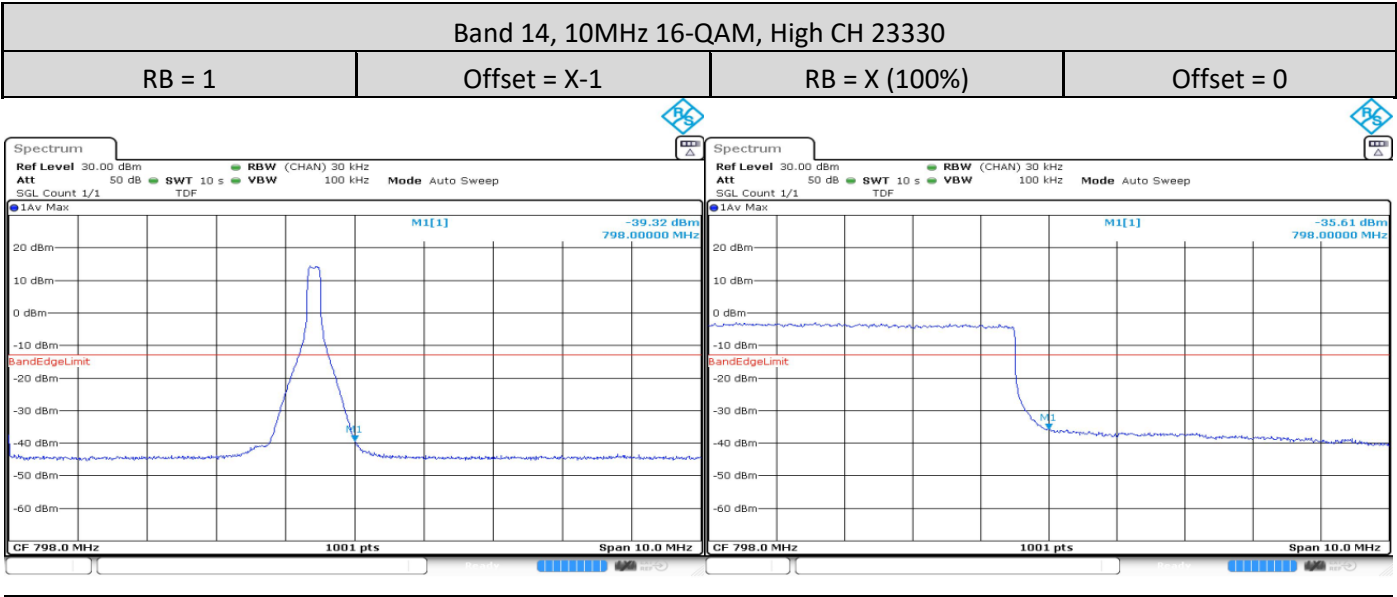
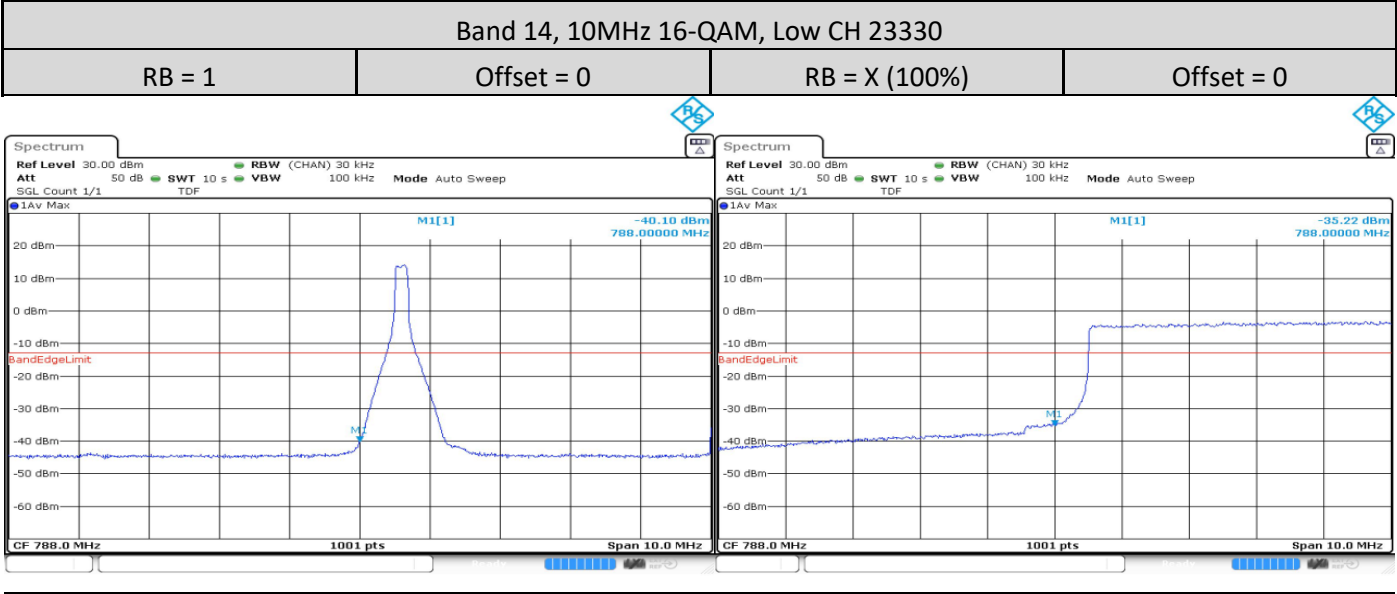
Band Edge Conducted Spurious Emission

Band 14, 5MHz QPSK, Low CH 23305			
RB = 1	Offset = 0	RB = X (100%)	Offset = 0



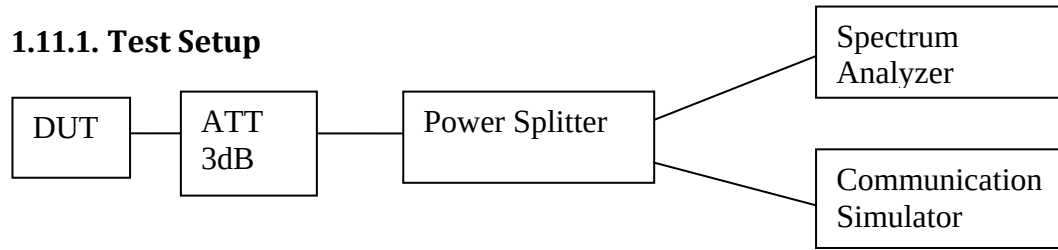






1.11. Conducted Spurious Emission

1.11.1. Test Setup



- 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.

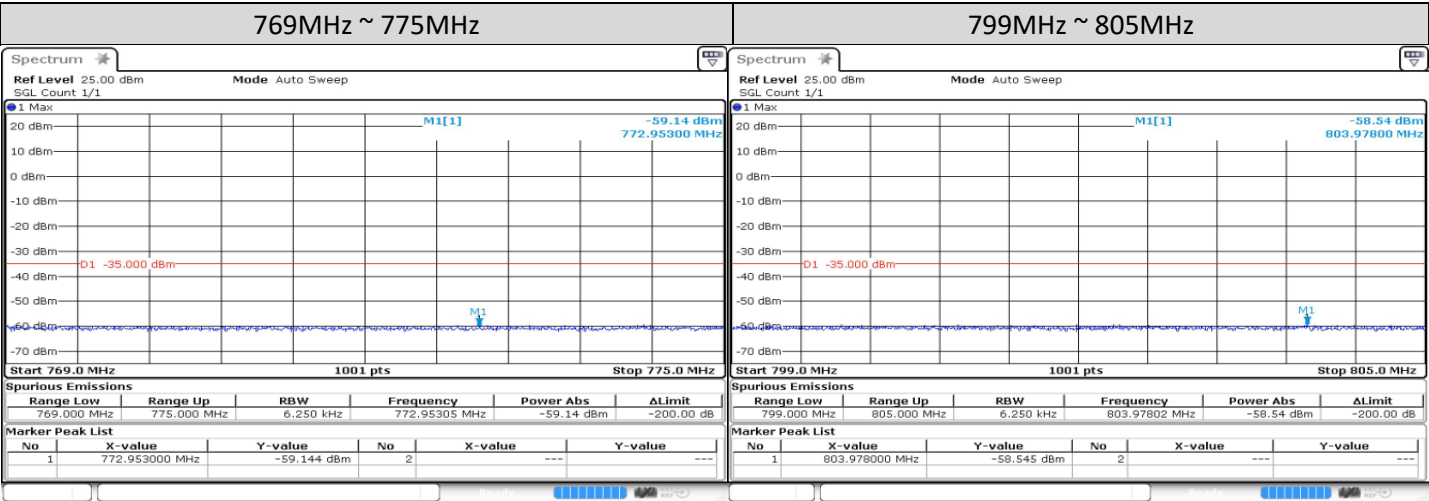
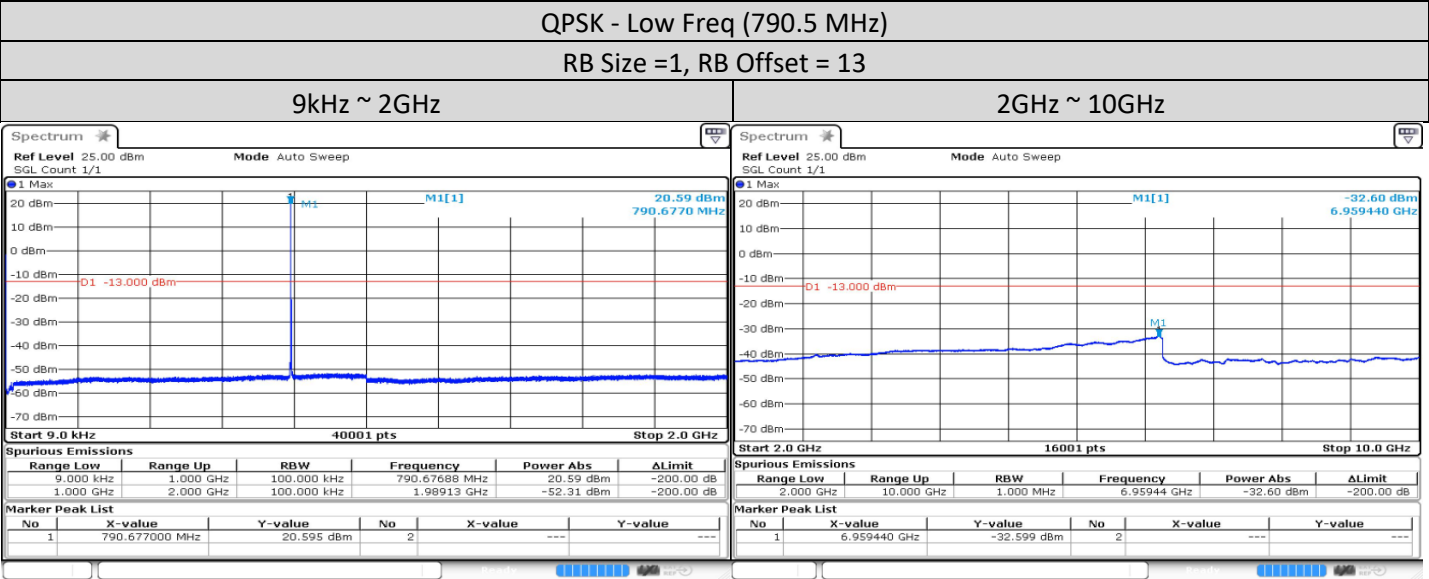
(3) On any frequency between 775-788 MHz, above 805 MHz, and below 758 MHz, by at least $43 + 10 \log (P)$ dB.

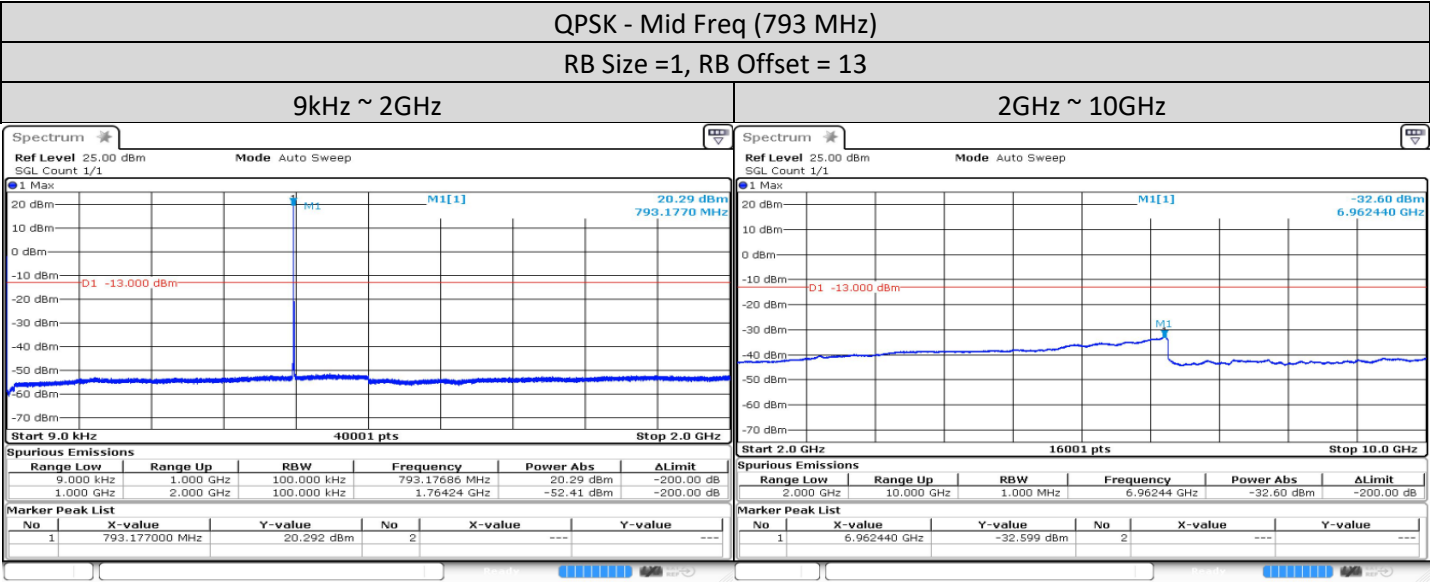
(4) Compliance with the provisions of paragraphs (e)(1) and (2) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment.

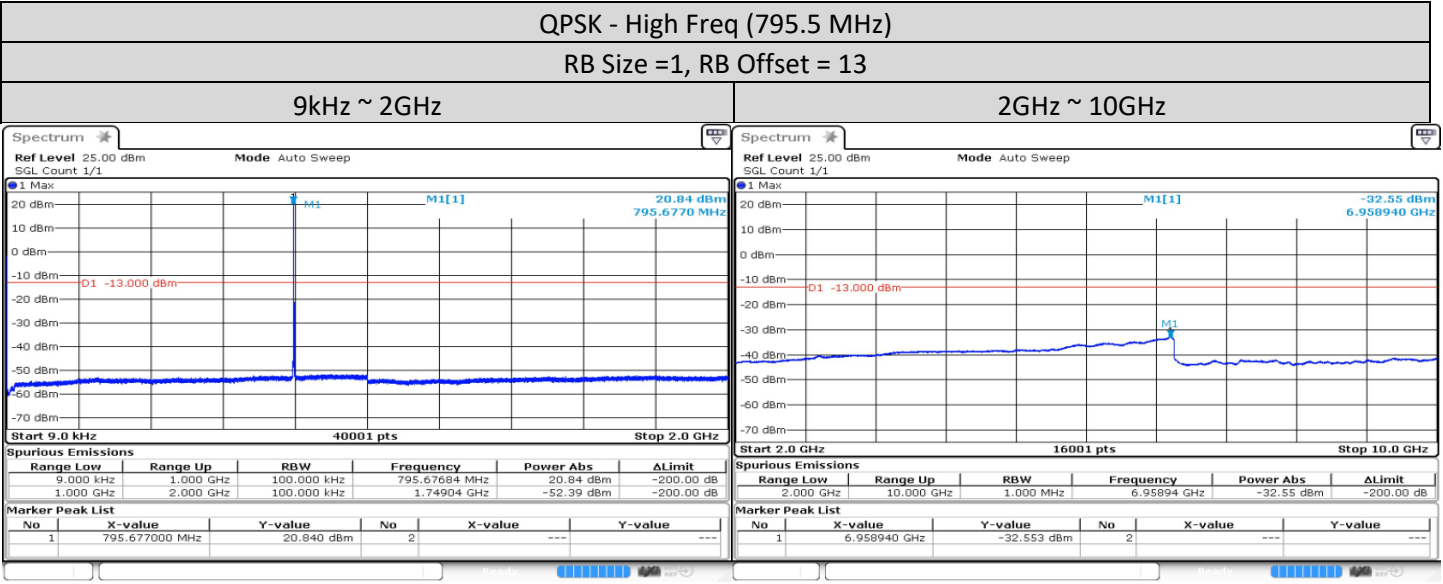
(5) Compliance with the provisions of paragraph (e)(3) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of 30 kHz may be employed.

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

5MHz

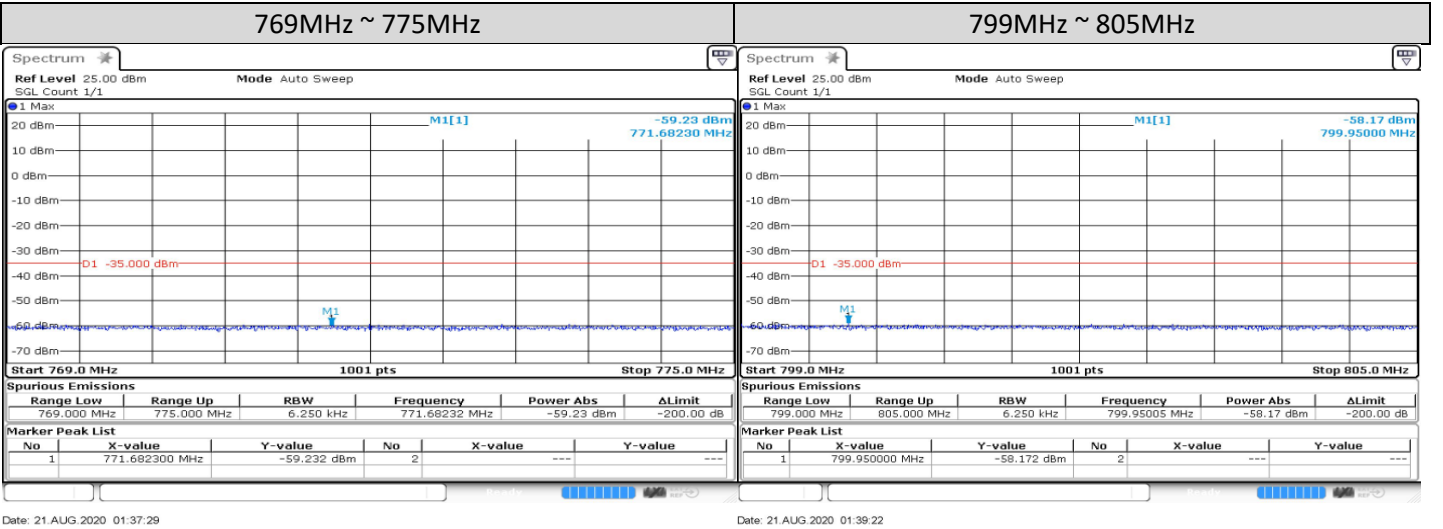






Date: 21.AUG.2020 01:07:48

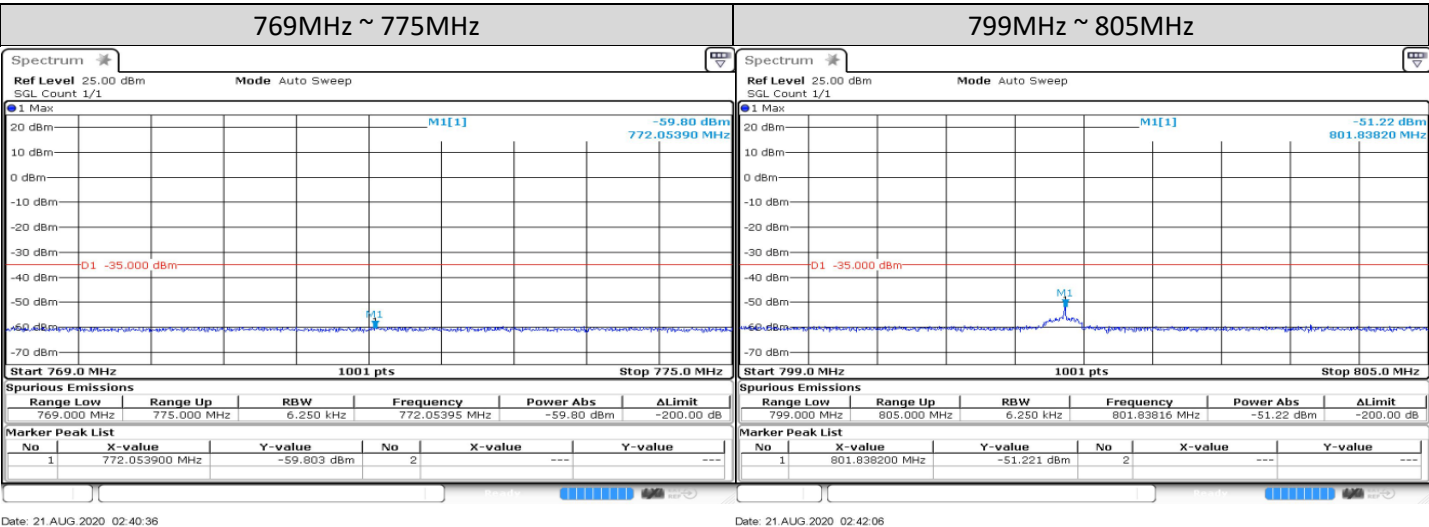
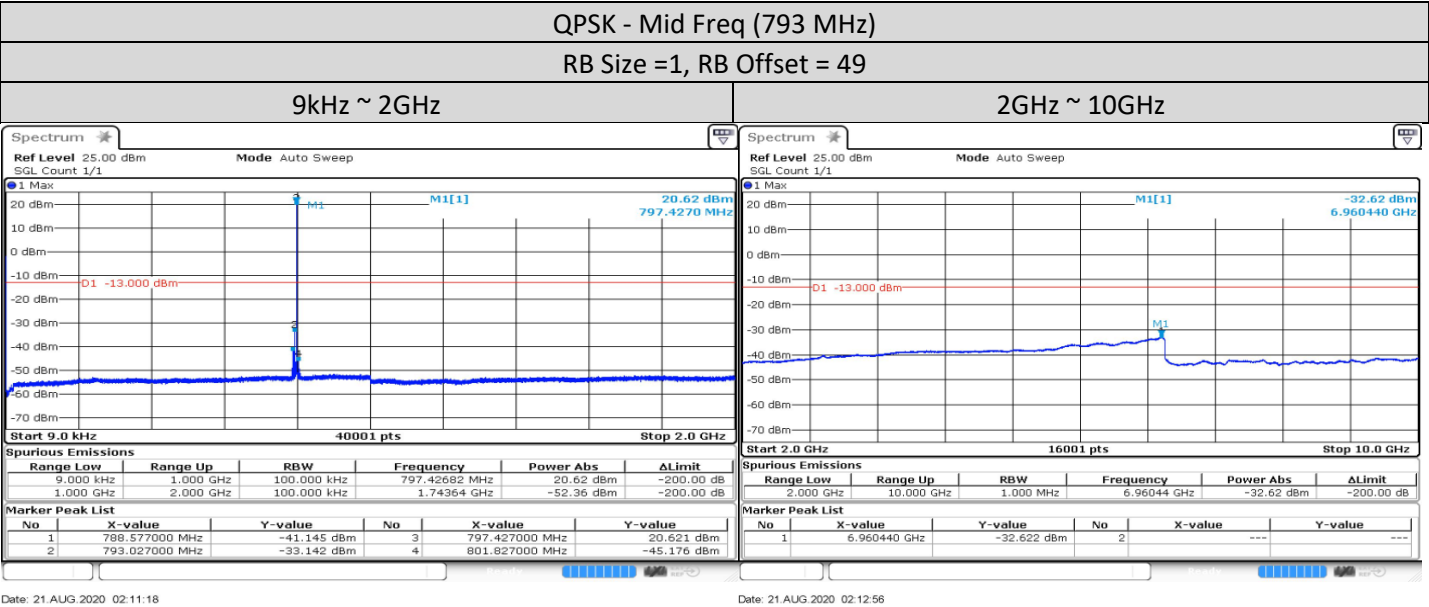
Date: 21.AUG.2020 01:09:25



Date: 21.AUG.2020 01:37:29

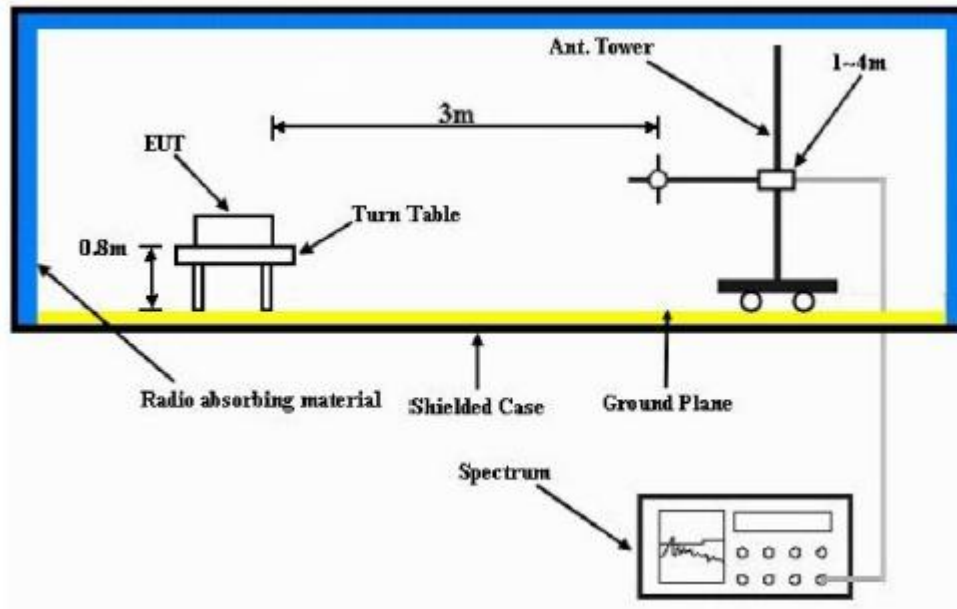
Date: 21.AUG.2020 01:39:22

10MHz



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.

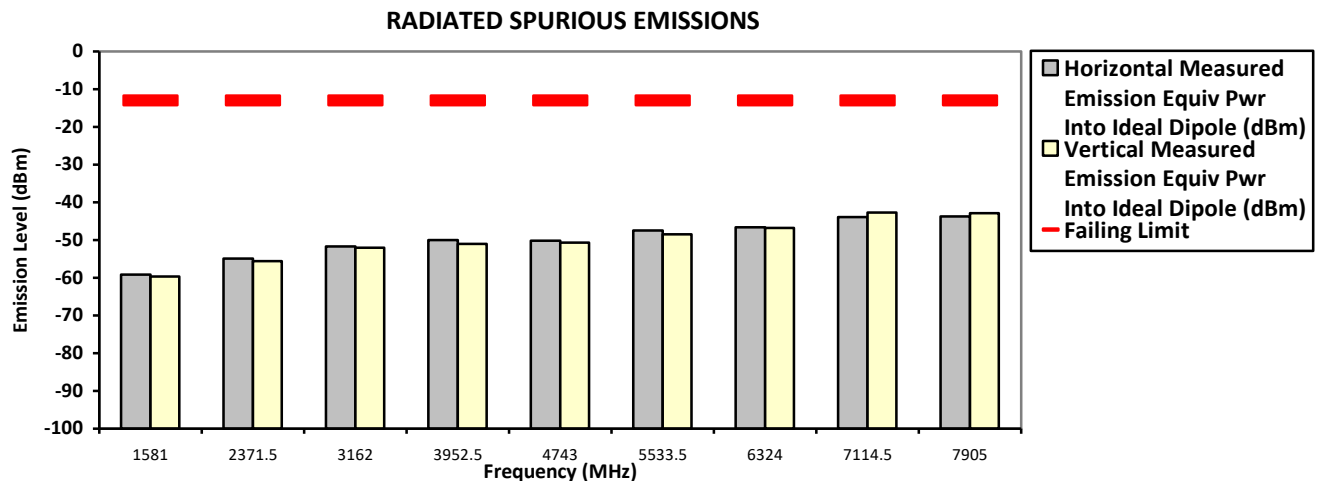
1.12.2. Test Limit

- (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.

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 **



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

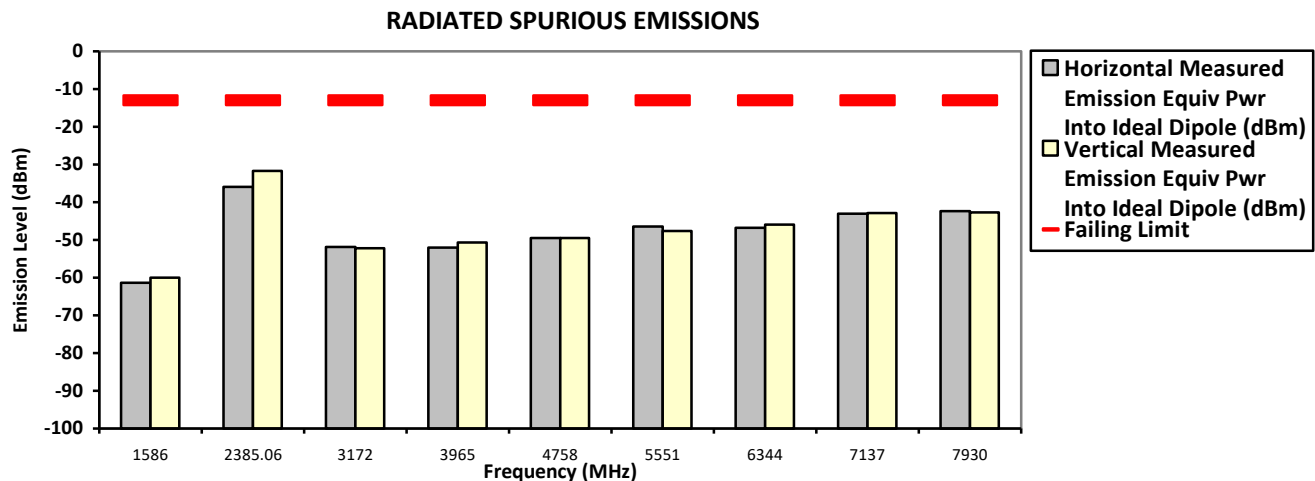
System MU: 4.03 dB

Remarks:

Passed Results	Marginal Results	Failed Results
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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 **



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

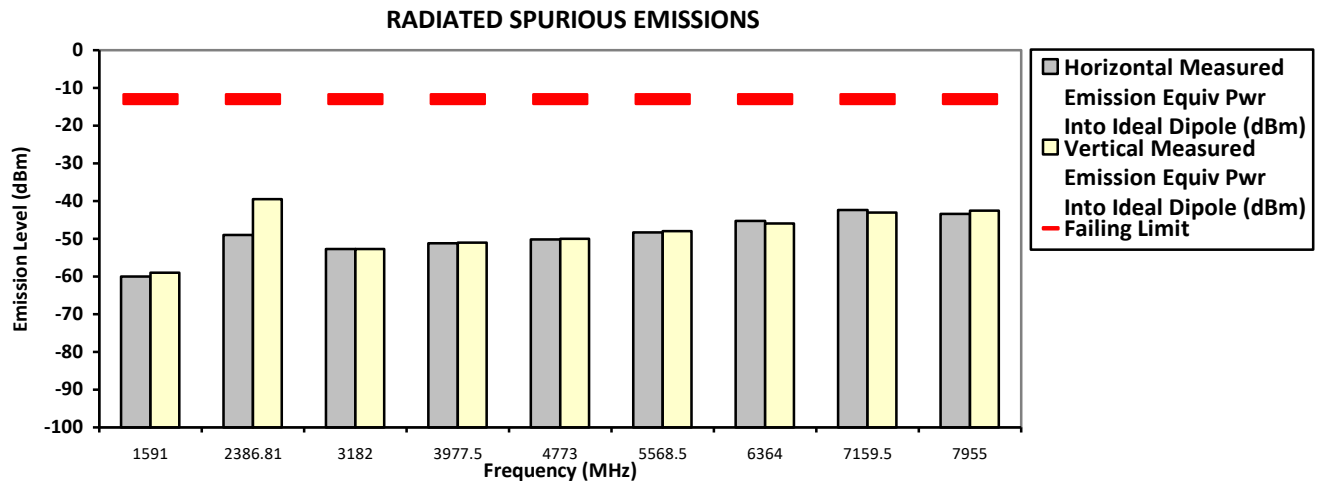
System MU: 4.03 dB

Remarks:

Passed Results	Marginal Results	Failed Results
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Model Number: AAH90ZDU9RH1AN SAC Transmitter Radiated Emission: S/N: 734TWP0308 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 **



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

Model Number: AAH90ZDU9RH1AN
 Battery Part No: PMNN4804A

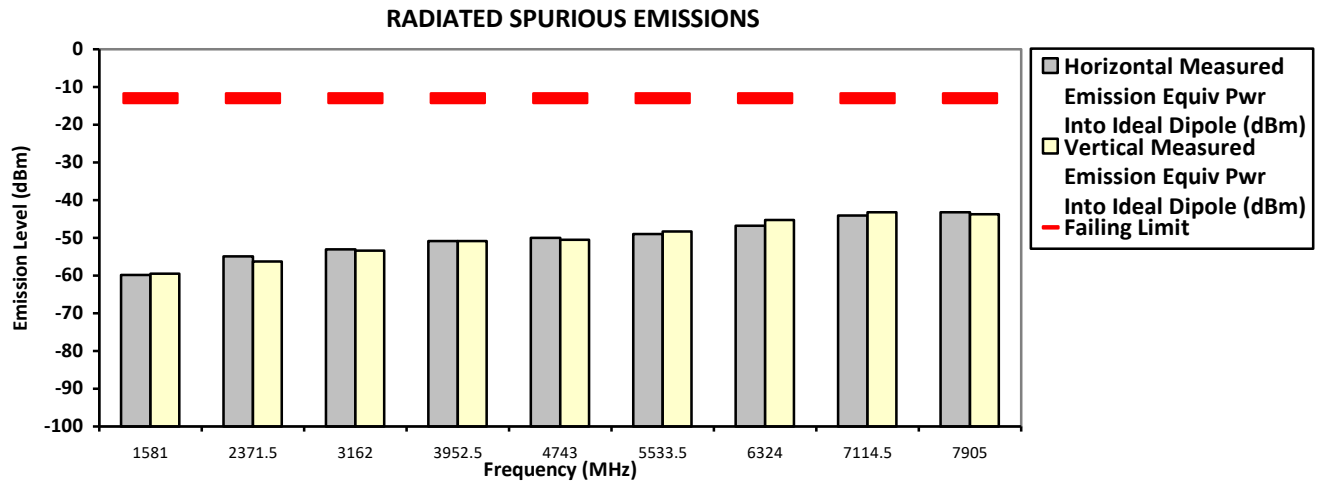
SAC Transmitter Radiated Emission:
 S/N: 734TWP0308
 Accy Part No: AN000348A01
 Test Mode: TX LTE (Band 14) Y-Plane
 Bandwidth 5MHz

SR:18058-EMC-00054

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 **



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

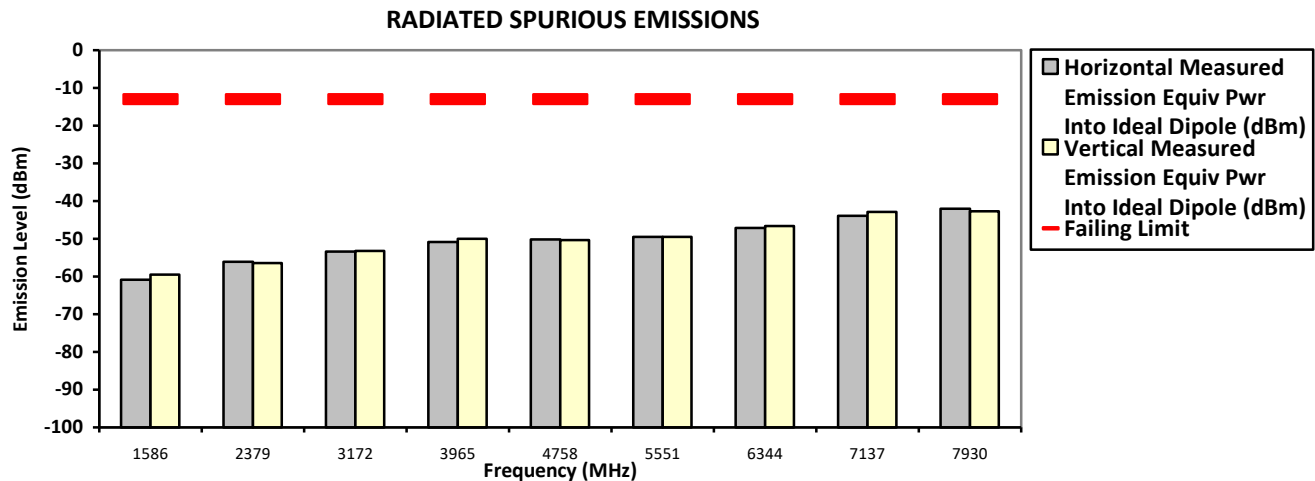
System MU: 4.03 dB

Remarks:

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

Model Number: AAH90ZDU9RH1AN SAC Transmitter Radiated Emission: 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 **



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.

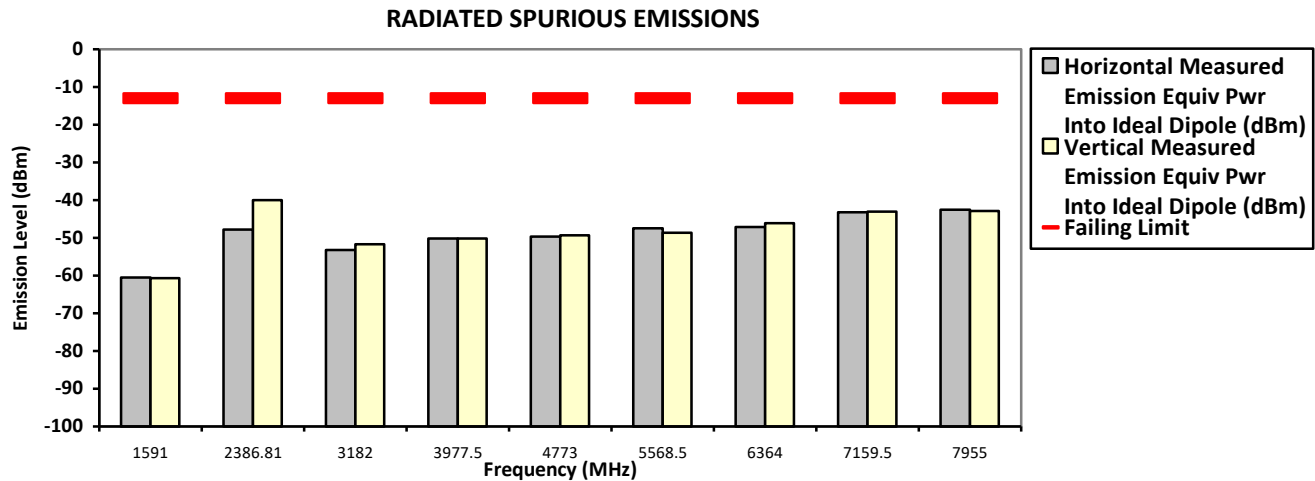
*Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported
Temp(Deg): 23.9 Hum(%RH): 68.7

System MU: 4.03 dB

Remarks: Passed Results Marginal Results Failed Results

Model Number: AAH90ZDU9RH1AN SAC Transmitter Radiated Emission: 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 **



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.

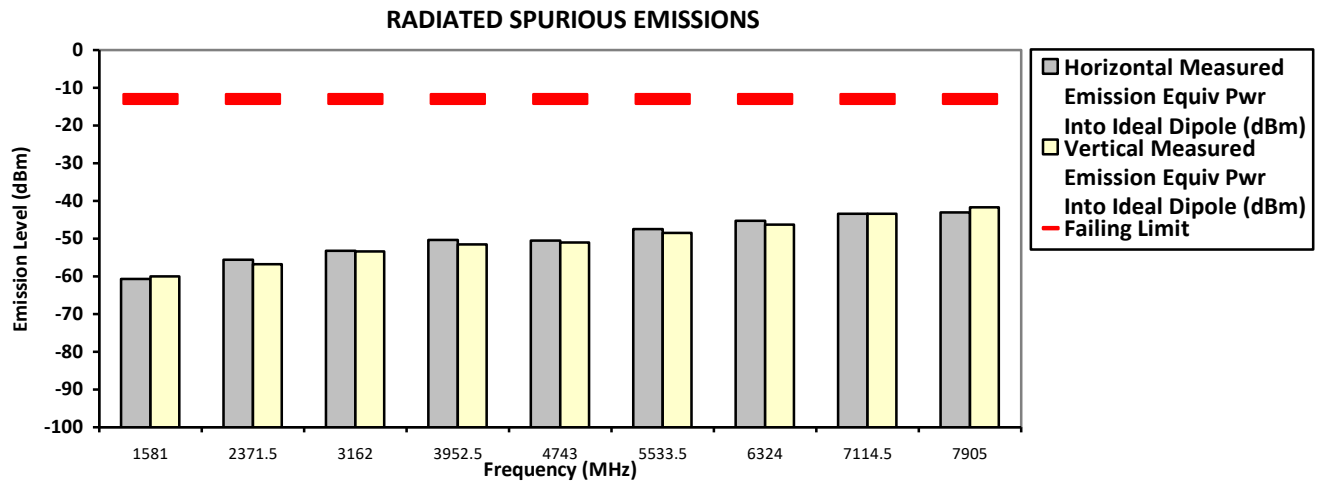
*Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported
Temp(Deg): 23.9 Hum(%RH): 68.7

System MU: 4.03 dB

Remarks: Passed Results Marginal Results Failed Results

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 **



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

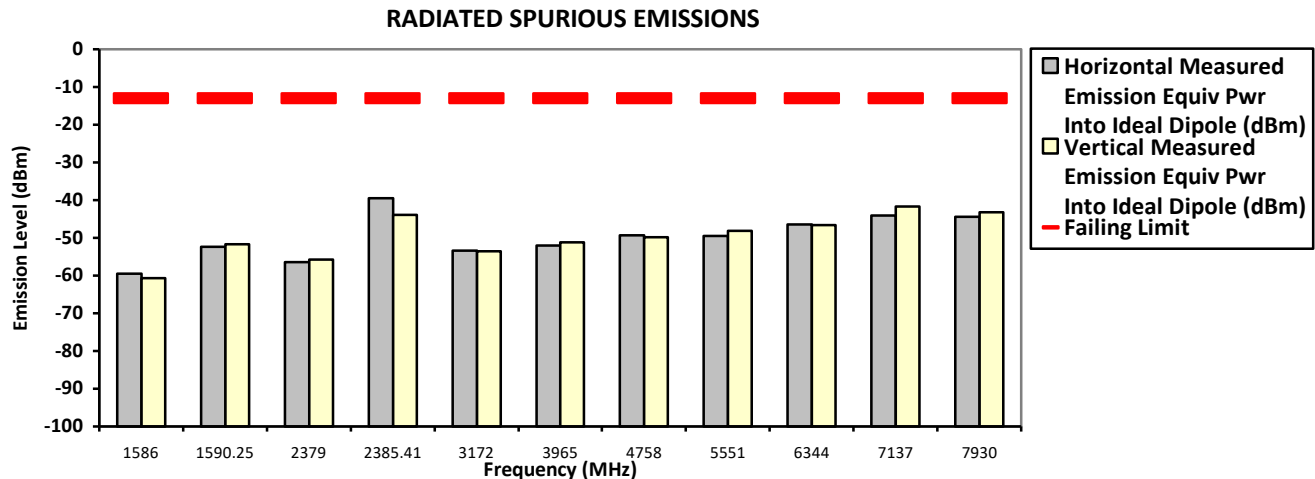
System MU: 4.03 dB

Remarks:

Passed Results	Marginal Results	Failed Results
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Model Number: AAH90ZDU9RH1AN SAC Transmitter Radiated Emission: 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 **



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:

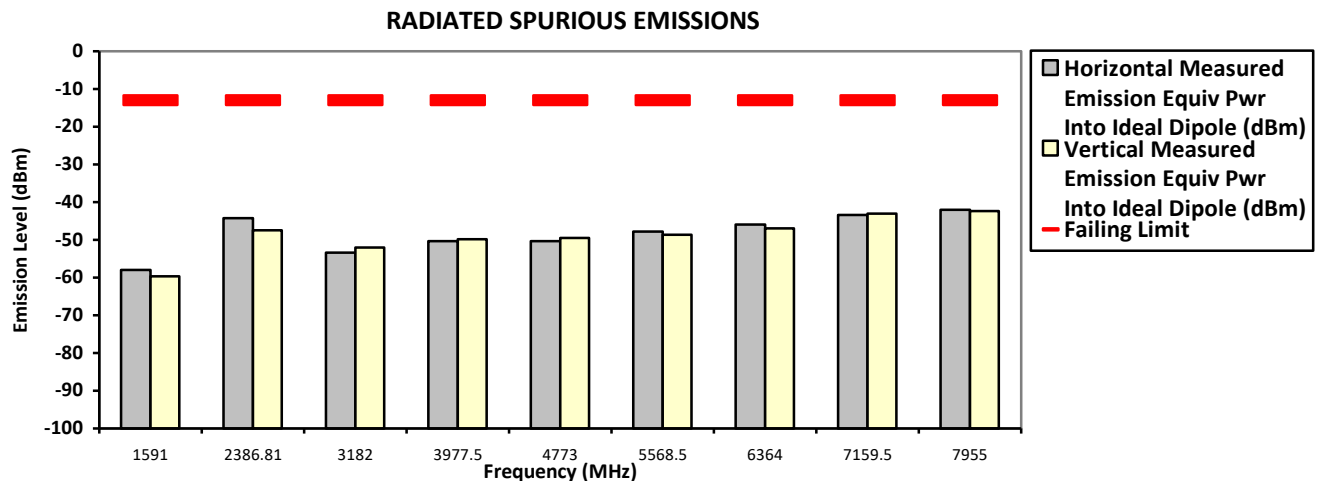
Passed Results	Marginal Results	Failed Results
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Model Number: AAH90ZDU9RH1AN
 Battery Part No: PMNN4804A
 795.500000 MHz (High)

SAC Transmitter Radiated Emission:
 S/N: 734TWP0308
 Accy Part No: AN000348A01
 Test Mode: TX LTE (Band 14) Z-Plane
 Bandwidth 5MHz

SR:18058-EMC-00054
 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 **



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.

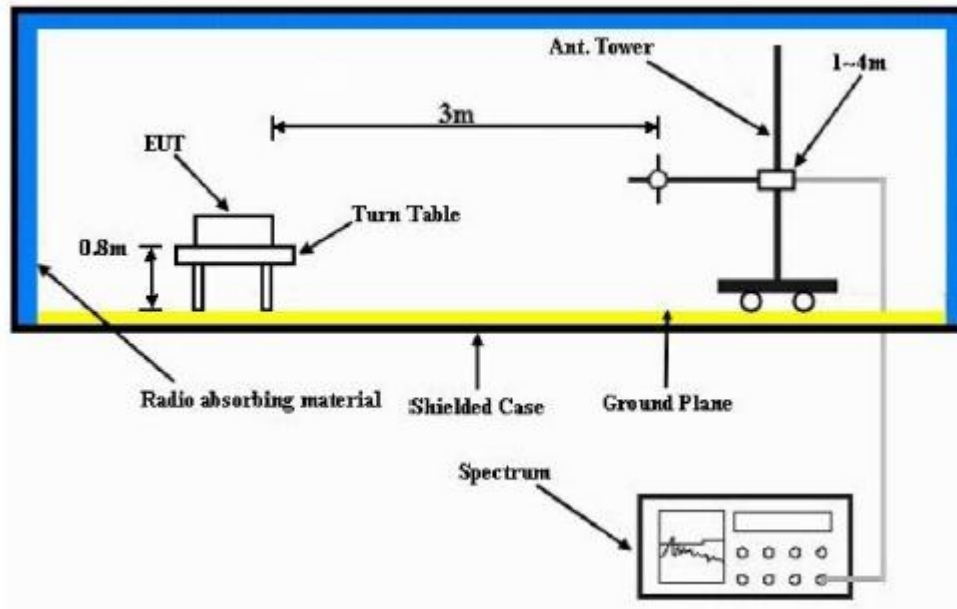
*Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported
 Temp(Deg): 23.9 Hum(%RH): 68.7

System MU: 4.03 dB

Remarks: Passed Results Marginal Results Failed Results

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) $ERP = \text{“Read Value”} + \text{Measured substitution value.}$

1.13.2. Test Limit

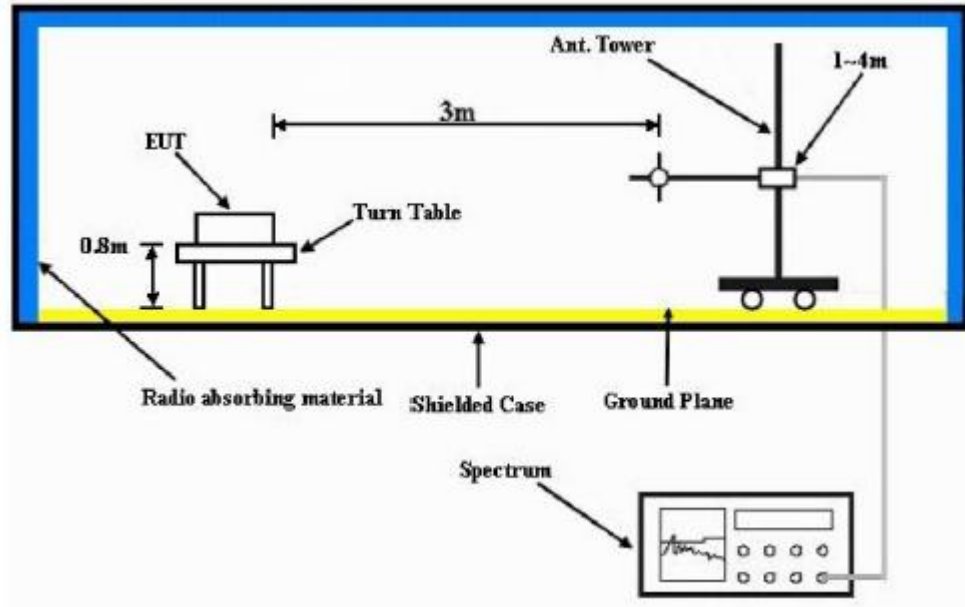
The maximum output power of the transmitter for mobile stations is 100 watts (20 dBw). Power is given in terms of effective radiated power (ERP).

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

Not Performed.

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) $EIRP = \text{“Read Value”} + \text{Measured substitution value} + 2.15.$

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)

S/N: 734TWP0308

Channel Bandwidth: 5 MHz

Accessory: AN000348A01

Tx Power: 0.252 Watts

Modulation: QPSK (LTE B14)

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

Channel Bandwidth: 5 MHz

Accessory: AN000348A01

Tx Power: 0.252 Watts

Modulation: QPSK (LTE B14)

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

EIRP in RNSS band (1.559GHz to 1.610GHz)

S/N: 734TWP0308
Channel Bandwidth: 5 MHz
Accessory: AN000348A01

Tx Power: 0.252 Watts
Modulation: QPSK (LTE B14)
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--