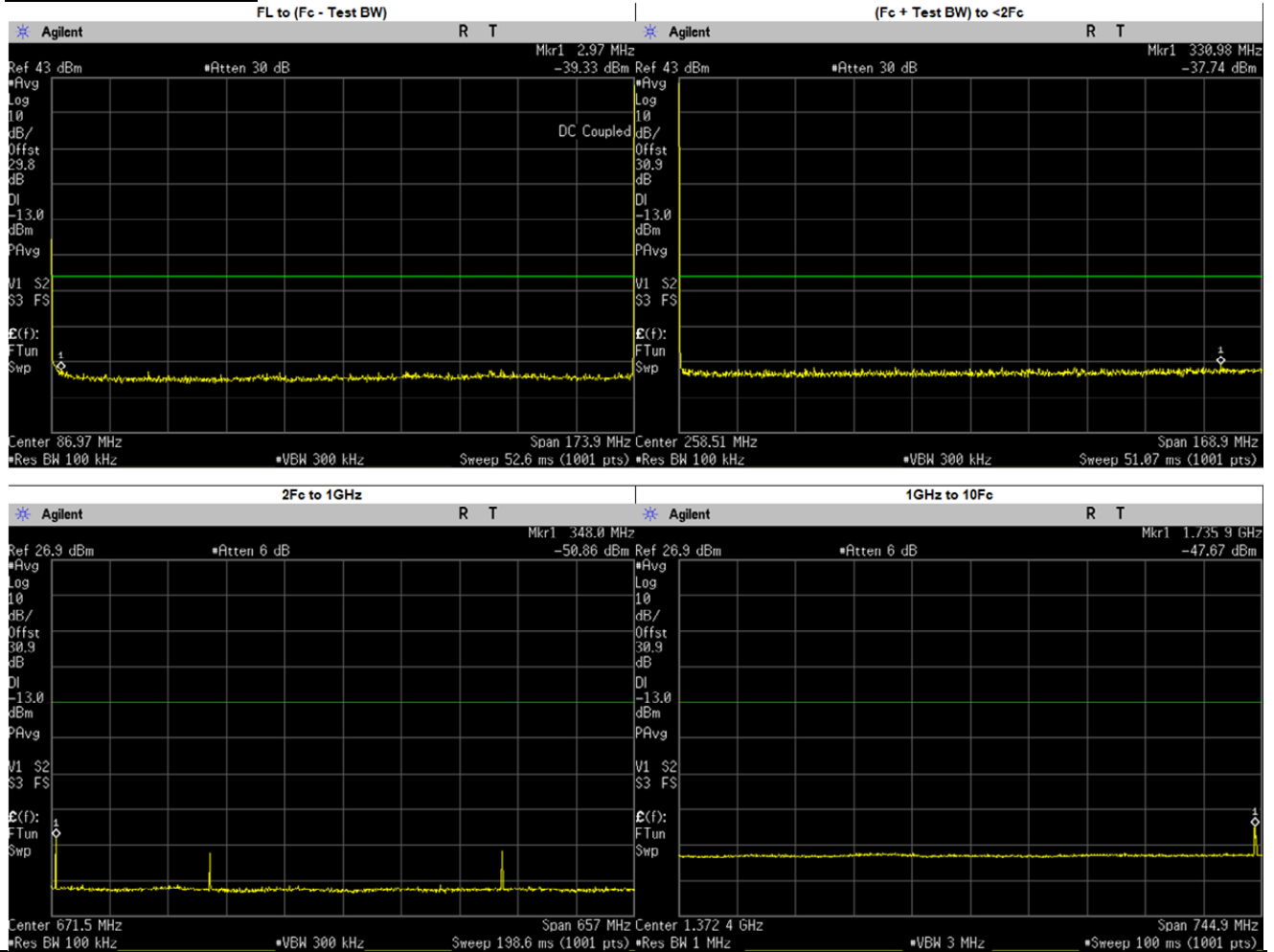
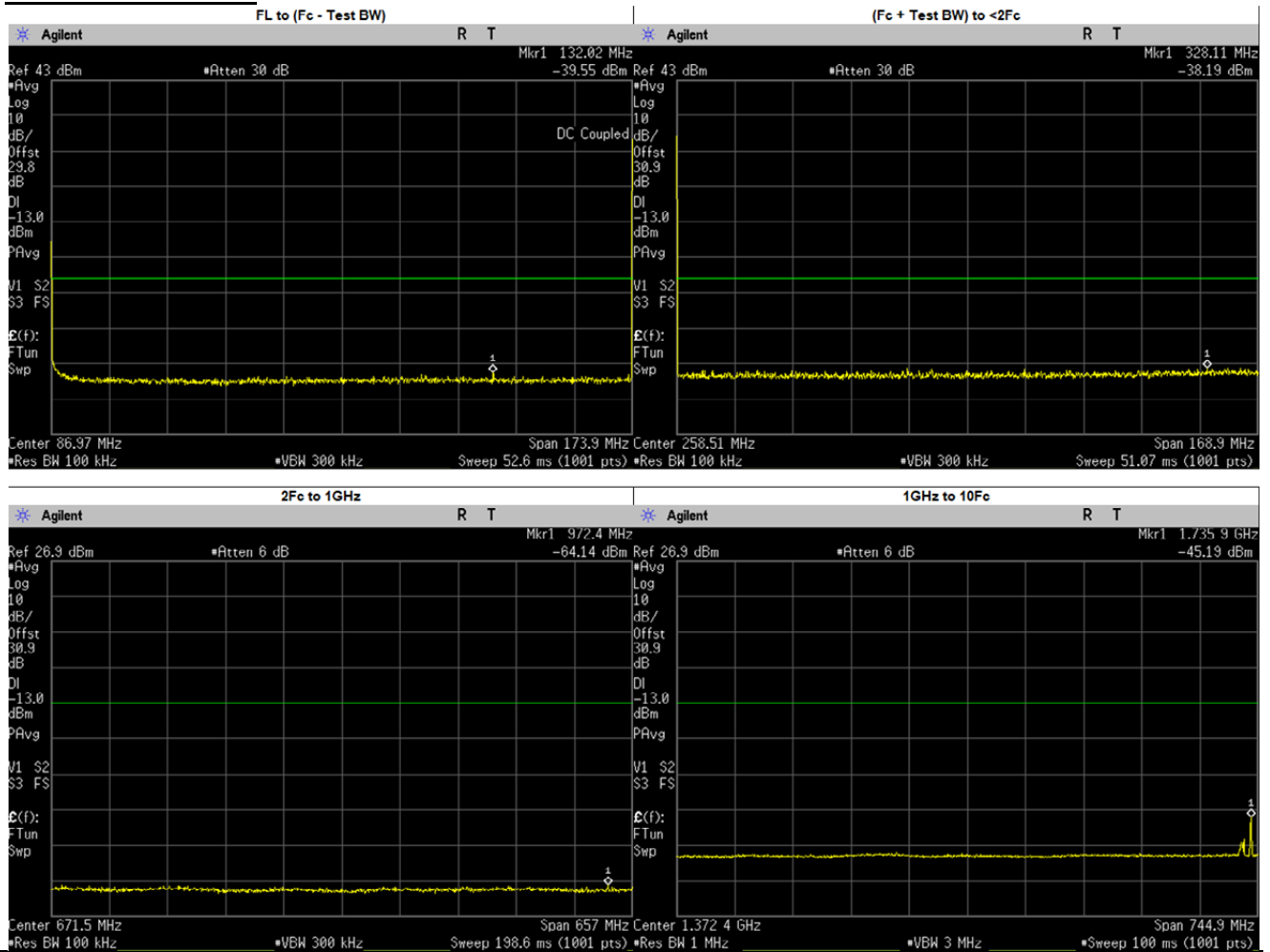


Analog: 173.9875. MHz, 25.0. kHz Channel Spacing, Max. Power
Not for FCC review



Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	2.9700	-39.3320	-13.00	PASS
(Fc + Test BW) to <2Fc	330.9808	-37.7400	-13.00	PASS
2Fc to 1GHz	348.0000	-50.8600	-13.00	PASS
	347.9750	-54.3410	-13.00	PASS
	521.9625	-58.8078	-13.00	PASS
	695.9500	-66.2747	-13.00	PASS
	869.9375	-65.5027	-13.00	PASS
1GHz to 10Fc	1735.9370	-47.6700	-13.00	PASS
	1043.9250	-56.2735	-13.00	PASS
	1217.9120	-56.0116	-13.00	PASS
	1391.9000	-56.0527	-13.00	PASS
	1565.8880	-55.9290	-13.00	PASS
	1739.8750	-55.8142	-13.00	PASS

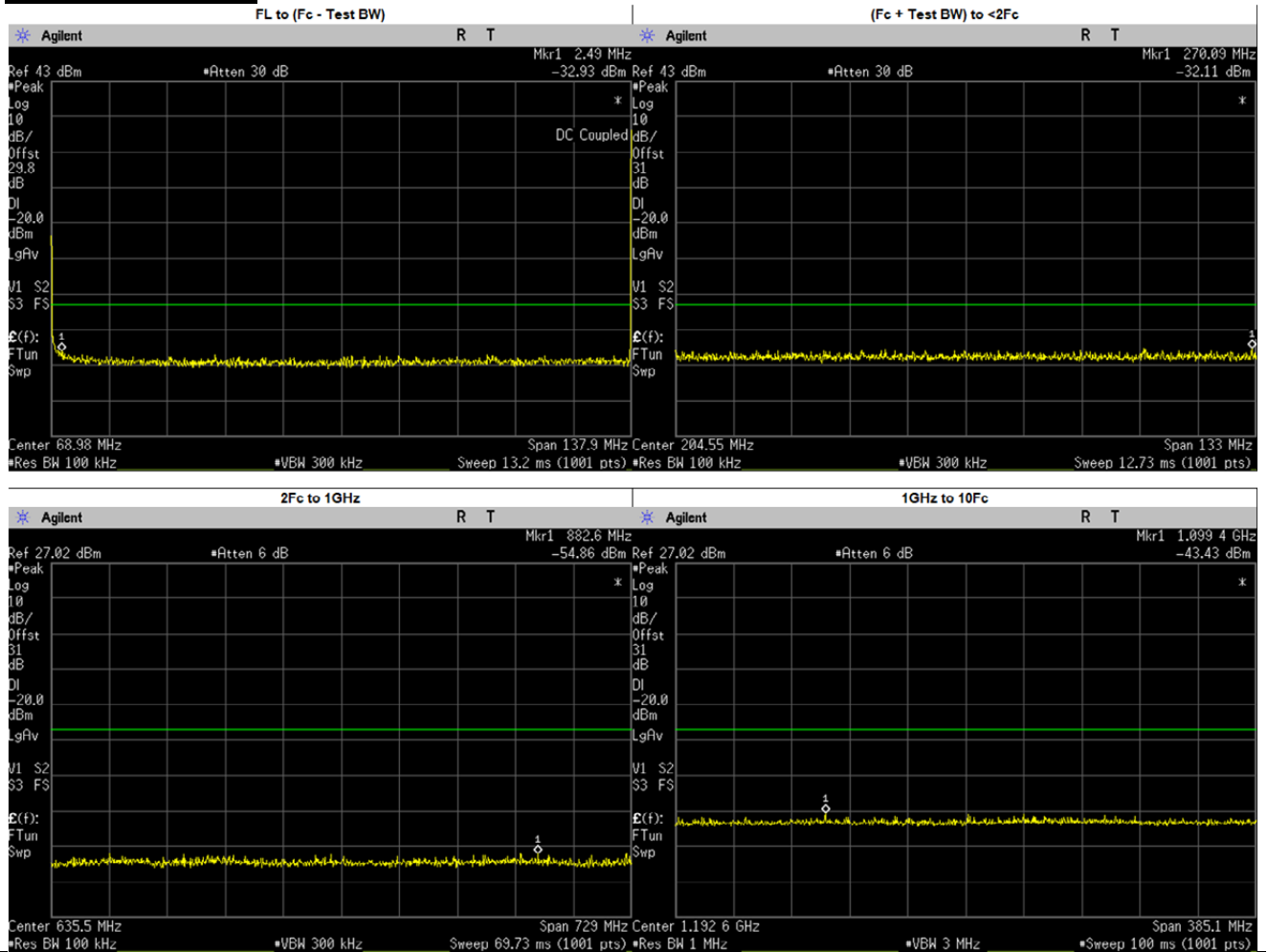
Analog: 173.9875. MHz, 25.0.kHz Channel Spacing, Low. Power
Not for FCC review



Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	132.0200	-39.5500	-13.00	PASS
(Fc + Test BW) to <2Fc	328.1090	-38.1900	-13.00	PASS
2Fc to 1GHz	972.4049	-64.1400	-13.00	PASS
	347.9750	-64.8459	-13.00	PASS
	521.9625	-65.6046	-13.00	PASS
	695.9500	-65.6889	-13.00	PASS
	869.9375	-65.2321	-13.00	PASS
1GHz to 10Fc	1735.9370	-45.1900	-13.00	PASS
	1043.9250	-56.1771	-13.00	PASS
	1217.9120	-55.8434	-13.00	PASS
	1391.9000	-56.0406	-13.00	PASS
	1565.8880	-55.9639	-13.00	PASS
	1739.8750	-55.7330	-13.00	PASS

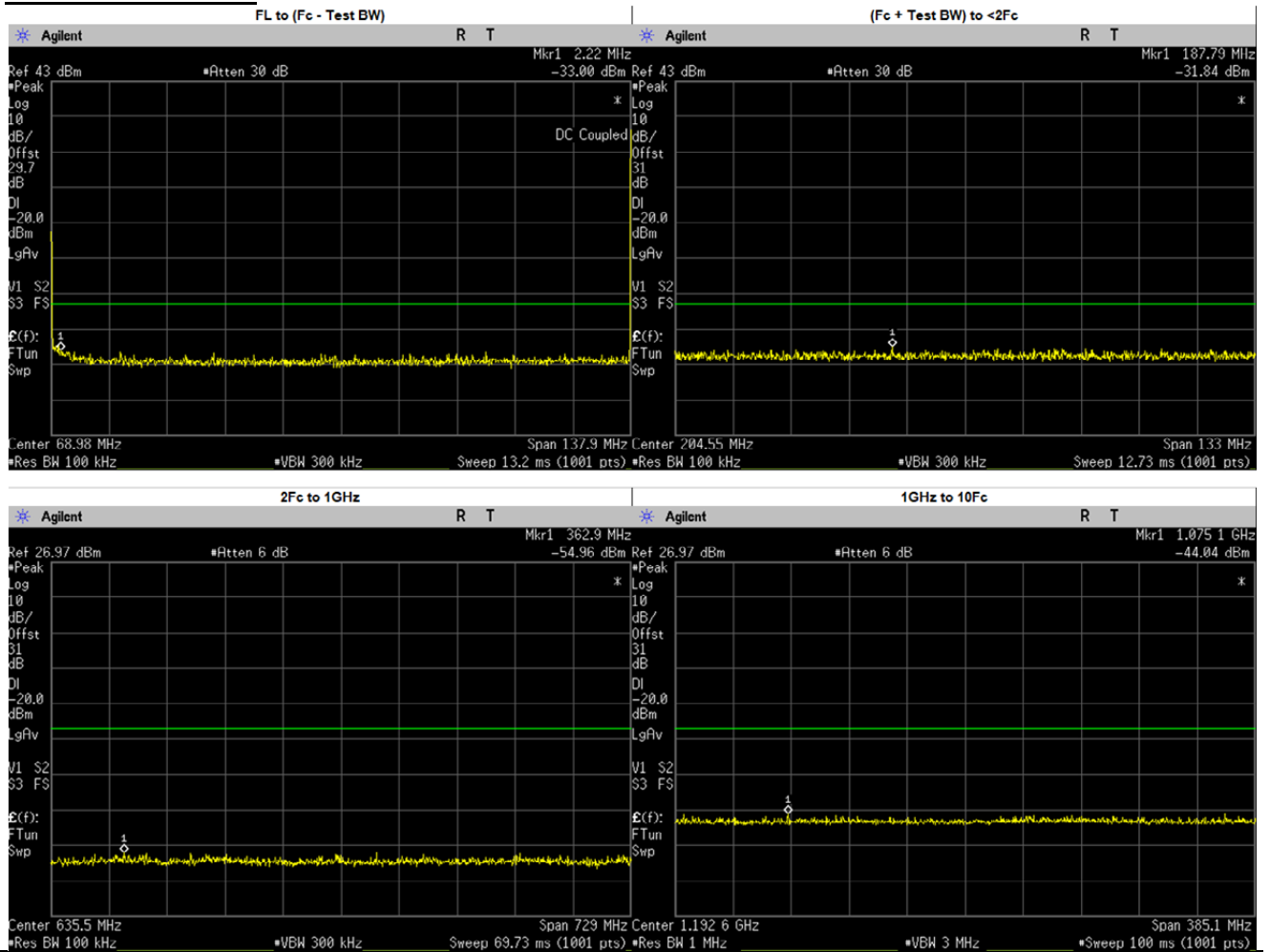
6.10.3. Test Result (Digital)

Digital: 138.0125. MHz, 12.5 kHz Channel Spacing, Max. Power Not for FCC review



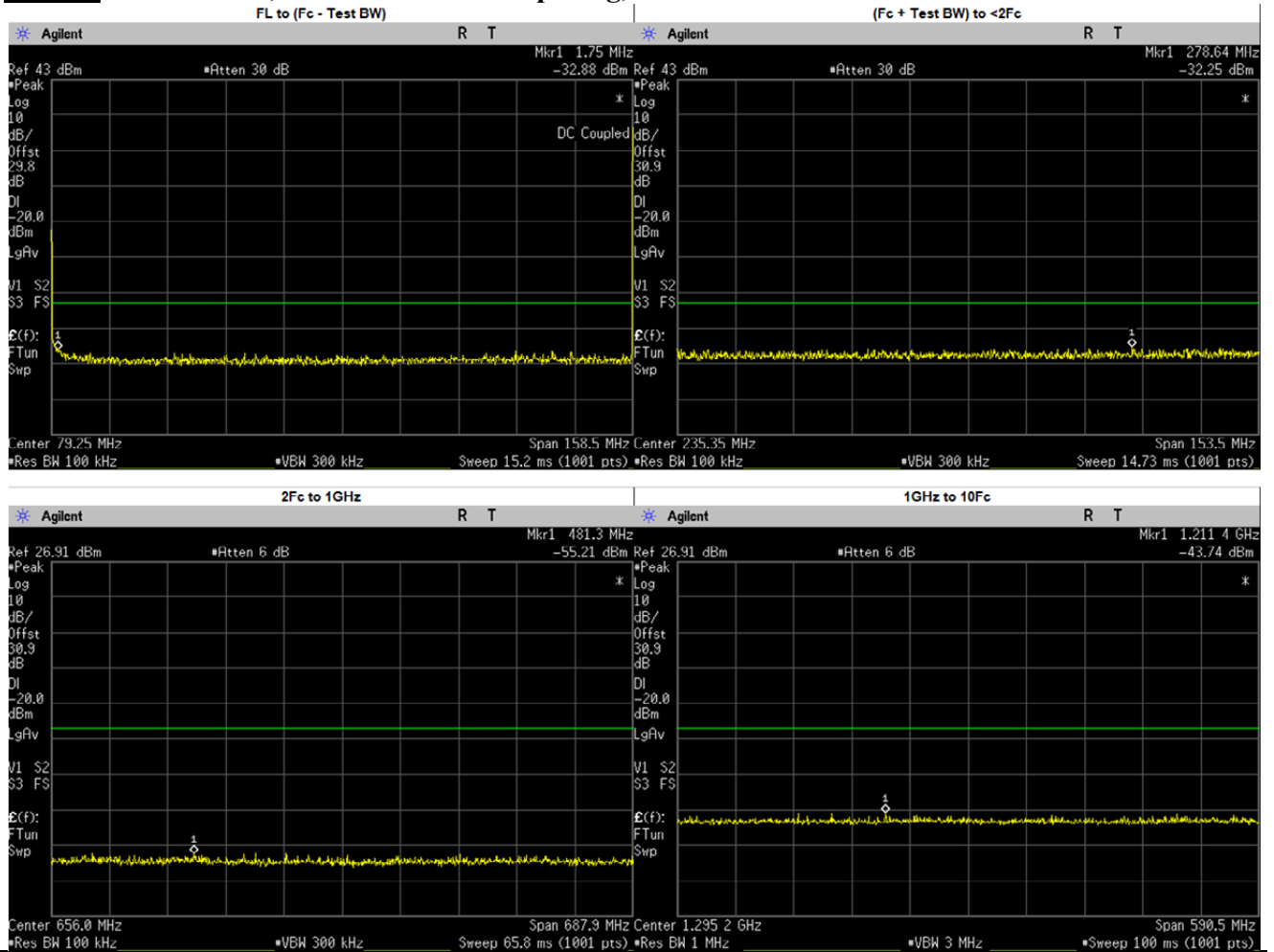
Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	2.4900	-32.9320	-20.00	PASS
(Fc + Test BW) to <2Fc	270.0943	-32.1100	-20.00	PASS
2Fc to 1GHz	882.6350	-54.8600	-20.00	PASS
	276.0250	-58.8438	-20.00	PASS
	414.0375	-57.9545	-20.00	PASS
	552.0500	-57.9194	-20.00	PASS
	690.0625	-57.6542	-20.00	PASS
	828.0750	-57.8172	-20.00	PASS
	966.0875	-57.3860	-20.00	PASS
1GHz to 10Fc	1099.3620	-43.4300	-20.00	PASS
	1104.1000	-46.1487	-20.00	PASS
	1242.1120	-46.0465	-20.00	PASS
	1380.1250	-46.2720	-20.00	PASS

Digital: 138.0125. MHz, 12.5.kHz Channel Spacing, Low. Power
Not for FCC review



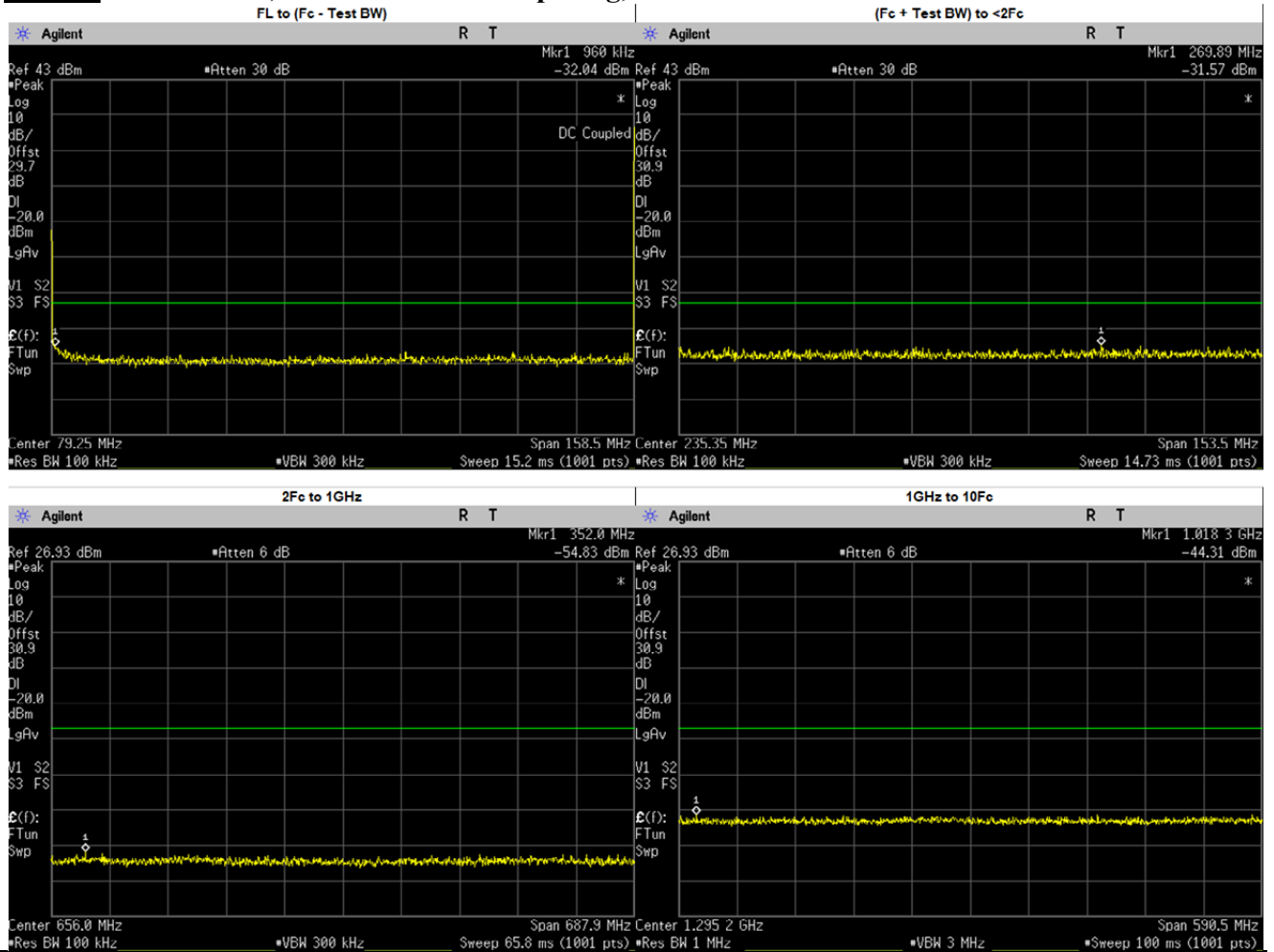
Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	2.2200	-33.0000	-20.00	PASS
(Fc + Test BW) to <2Fc	187.7940	-31.8400	-20.00	PASS
2Fc to 1GHz	362.8759	-54.9600	-20.00	PASS
	276.0250	-57.6276	-20.00	PASS
	414.0375	-58.0268	-20.00	PASS
	552.0500	-56.9757	-20.00	PASS
	690.0625	-57.9449	-20.00	PASS
	828.0750	-57.6786	-20.00	PASS
	966.0875	-58.2550	-20.00	PASS
1GHz to 10Fc	1075.0990	-44.0400	-20.00	PASS
	1104.1000	-46.2623	-20.00	PASS
	1242.1120	-46.2392	-20.00	PASS
	1380.1250	-46.7110	-20.00	PASS

Digital: 158.55. MHz, 12.5.kHz Channel Spacing, Max. Power



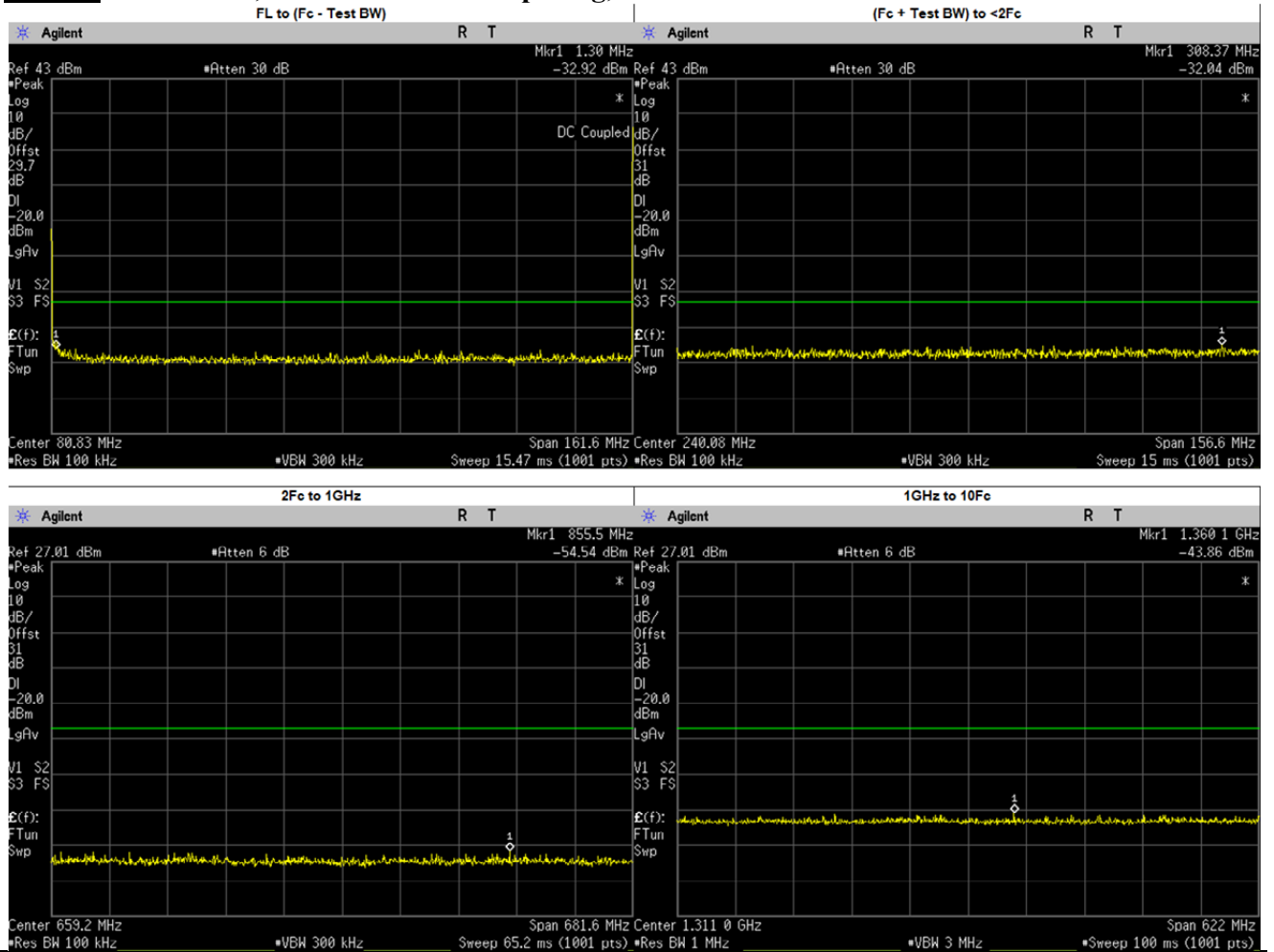
Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	1.7500	-32.8790	-20.00	PASS
(Fc + Test BW) to <2Fc	278.6382	-32.2500	-20.00	PASS
2Fc to 1GHz	481.3234	-55.2100	-20.00	PASS
	317.1000	-57.3133	-20.00	PASS
	475.6500	-57.8904	-20.00	PASS
	634.2000	-58.2340	-20.00	PASS
	792.7500	-57.2945	-20.00	PASS
	951.3000	-58.0209	-20.00	PASS
1GHz to 10Fc	1211.3990	-43.7300	-20.00	PASS
	1109.8500	-46.3133	-20.00	PASS
	1268.4000	-46.6889	-20.00	PASS
	1426.9500	-47.1225	-20.00	PASS
	1585.5000	-46.2653	-20.00	PASS

Digital: 158.55. MHz, 12.5.kHz Channel Spacing, Low. Power



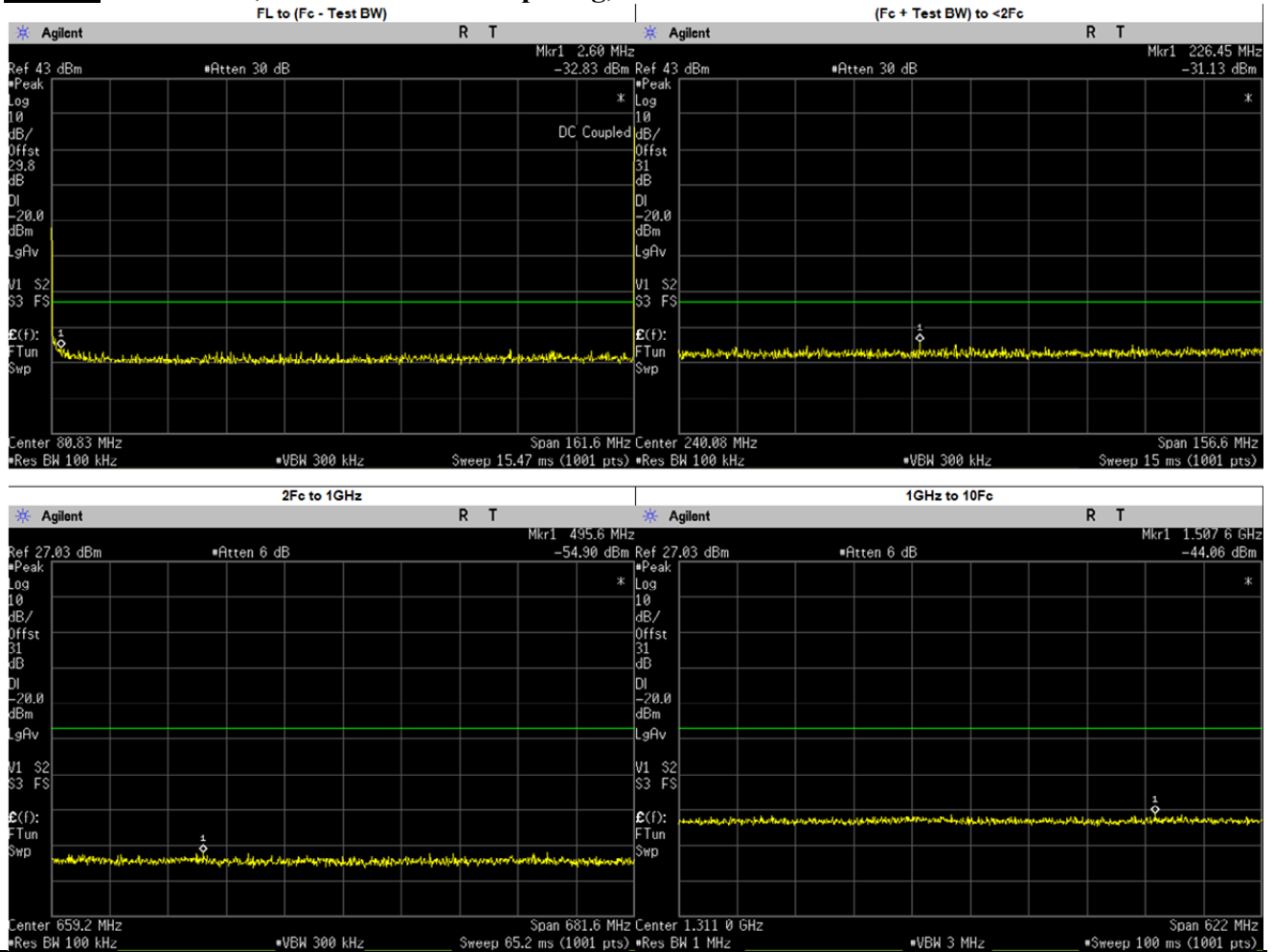
Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	0.9600	-32.0420	-20.00	PASS
(Fc + Test BW) to <2Fc	269.8890	-31.5700	-20.00	PASS
2Fc to 1GHz	351.9982	-54.8300	-20.00	PASS
	317.1000	-57.5131	-20.00	PASS
	475.6500	-56.9459	-20.00	PASS
	634.2000	-57.6845	-20.00	PASS
	792.7500	-58.1239	-20.00	PASS
	951.3000	-57.1863	-20.00	PASS
1GHz to 10Fc	1018.3060	-44.3100	-20.00	PASS
	1109.8500	-46.0863	-20.00	PASS
	1268.4000	-45.9205	-20.00	PASS
	1426.9500	-46.4353	-20.00	PASS
	1585.5000	-45.6321	-20.00	PASS

Digital: 161.7. MHz, 12.5.kHz Channel Spacing, Max. Power



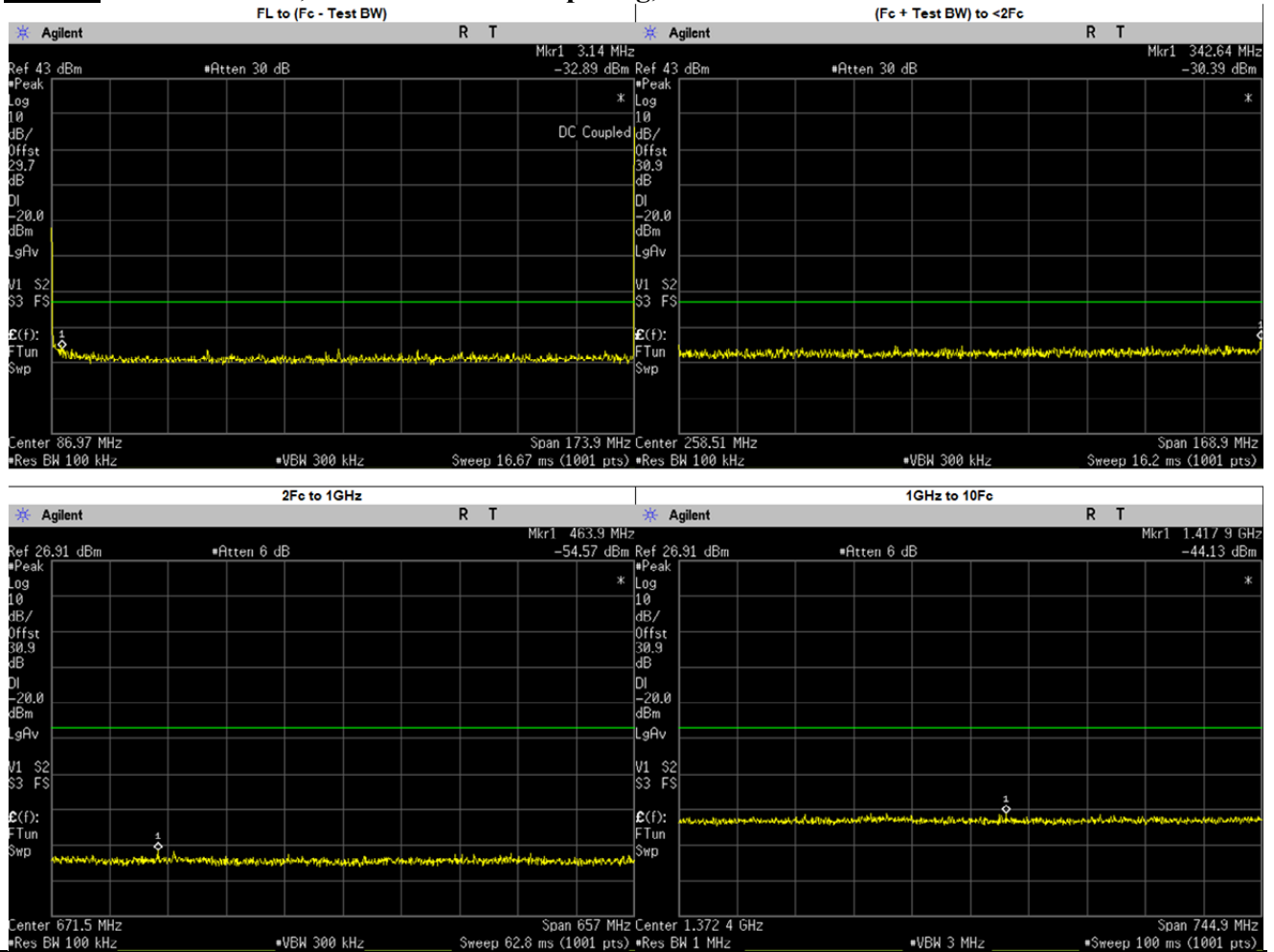
Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	1.3000	-32.9200	-20.00	PASS
(Fc + Test BW) to <2Fc	308.3748	-32.0400	-20.00	PASS
2Fc to 1GHz	855.5008	-54.5400	-20.00	PASS
	323.4000	-56.8678	-20.00	PASS
	485.1000	-57.0881	-20.00	PASS
	646.8000	-57.0988	-20.00	PASS
	808.5000	-57.4731	-20.00	PASS
	970.2000	-57.9262	-20.00	PASS
1GHz to 10Fc	1360.1380	-43.8600	-20.00	PASS
	1131.9000	-46.2911	-20.00	PASS
	1293.6000	-45.6936	-20.00	PASS
	1455.3000	-46.5945	-20.00	PASS
	1617.0000	-46.2902	-20.00	PASS

Digital: 161.7. MHz, 12.5.kHz Channel Spacing, Low. Power



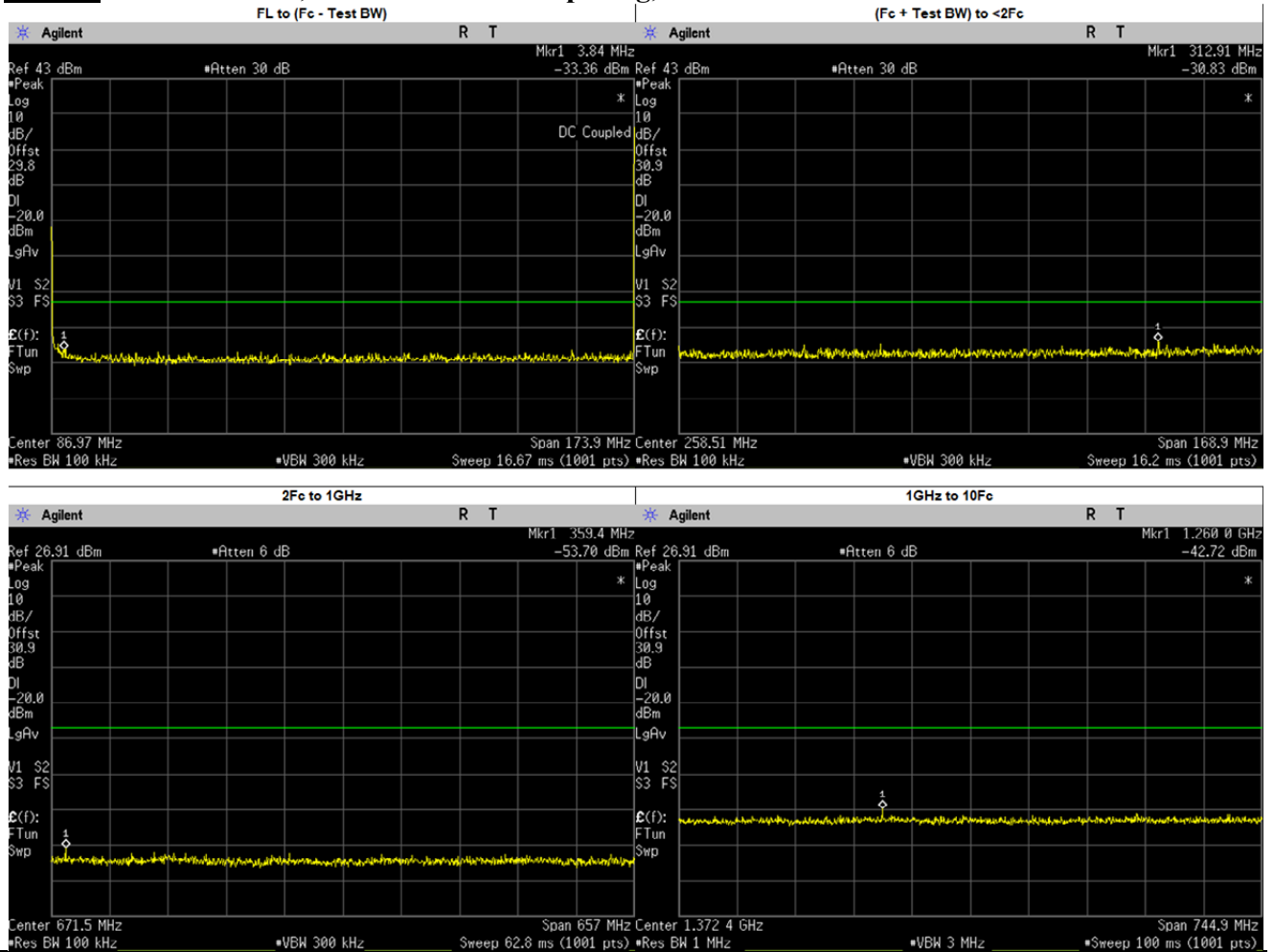
Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	2.6000	-32.8330	-20.00	PASS
(Fc + Test BW) to <2Fc	226.4498	-31.1300	-20.00	PASS
2Fc to 1GHz	495.6160	-54.9000	-20.00	PASS
	323.4000	-57.0217	-20.00	PASS
	485.1000	-56.9040	-20.00	PASS
	646.8000	-57.7544	-20.00	PASS
	808.5000	-57.6210	-20.00	PASS
	970.2000	-57.5018	-20.00	PASS
1GHz to 10Fc	1507.5520	-44.0600	-20.00	PASS
	1131.9000	-46.6211	-20.00	PASS
	1293.6000	-45.9058	-20.00	PASS
	1455.3000	-46.3608	-20.00	PASS
	1617.0000	-45.7459	-20.00	PASS

Digital: 173.3875. MHz, 12.5.kHz Channel Spacing, Max. Power



Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	3.1400	-32.8920	-20.00	PASS
(Fc + Test BW) to <2Fc	342.6371	-30.3900	-20.00	PASS
2Fc to 1GHz	463.8676	-54.5700	-20.00	PASS
	347.9750	-57.0077	-20.00	PASS
	521.9625	-57.6054	-20.00	PASS
	695.9500	-57.5648	-20.00	PASS
	869.9375	-58.0273	-20.00	PASS
1GHz to 10Fc	1417.8750	-44.1300	-20.00	PASS
	1043.9250	-45.5420	-20.00	PASS
	1217.9120	-46.4854	-20.00	PASS
	1391.9000	-45.9932	-20.00	PASS
	1565.8880	-46.5575	-20.00	PASS
	1739.8750	-45.6249	-20.00	PASS

Digital: 173.3875. MHz, 12.5.kHz Channel Spacing, Low. Power



Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	3.8400	-33.3640	-20.00	PASS
(Fc + Test BW) to <2Fc	312.9051	-30.8400	-20.00	PASS
2Fc to 1GHz	359.4006	-53.7000	-20.00	PASS
	347.9750	-57.0105	-20.00	PASS
	521.9625	-58.1186	-20.00	PASS
	695.9500	-57.7382	-20.00	PASS
	869.9375	-57.0316	-20.00	PASS
1GHz to 10Fc	1259.9610	-42.7200	-20.00	PASS
	1043.9250	-45.9877	-20.00	PASS
	1217.9120	-46.5687	-20.00	PASS
	1391.9000	-45.7444	-20.00	PASS
	1565.8880	-45.9575	-20.00	PASS
	1739.8750	-45.6326	-20.00	PASS

6.10.4. Test Limit

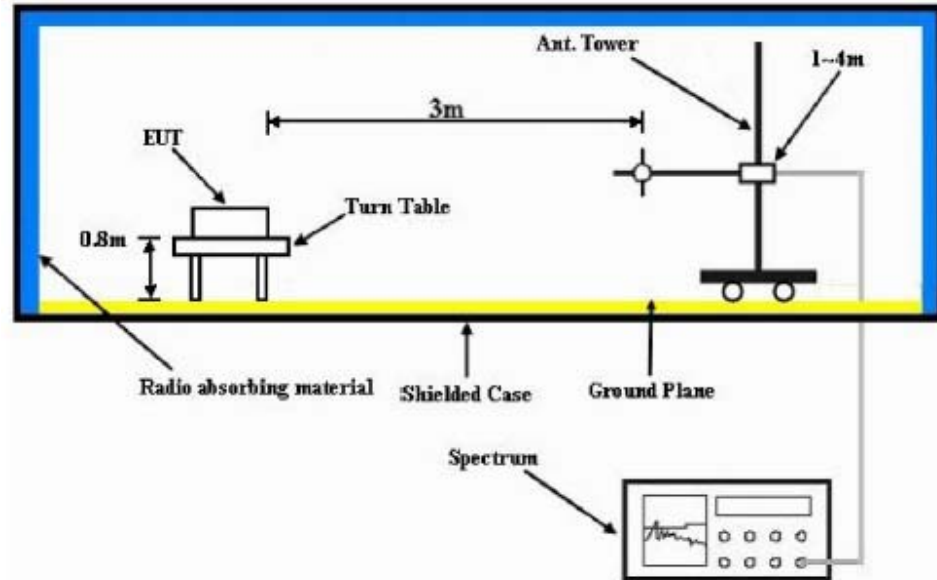
Table below summarized the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least

Channel Spacing	Part 22	Part 24D	Part 74	Part 80	Part 90 (UHF, VHF, 800, 900)	Part 90 (700)
12.5kHz	$43 + \log_{10}(P)$ (-13 dBm)	$43 + \log_{10}(P)$ (-13 dBm)	$43 + \log_{10}(P)$ (-13 dBm)	Not Applicable	$50 + \log_{10}(P)$ (-20 dBm)	$43 + \log_{10}(P)$ (-13 dBm)
25kHz		Not Applicable		$43 + \log_{10}(P)$ (-13 dBm)	$43 + \log_{10}(P)$ (-13 dBm)	$43 + \log_{10}(P)$ (-13 dBm)

Channel Spacing	RSS 134	RSS 182	RSS 119 (UHF, VHF, 800, 900)	RSS 119 (700)
12.5kHz	$43 + \log_{10}(P)$ (-13 dBm)	Not Applicable	$50 + \log_{10}(P)$ (-20 dBm)	$43 + \log_{10}(P)$ (-13 dBm)
25kHz	Not Applicable	$43 + \log_{10}(P)$ (-13 dBm)	$43 + \log_{10}(P)$ (-13 dBm)	$43 + \log_{10}(P)$ (-13 dBm)

6.11. Radiated Spurious Emission

6.11.1. Test Setup

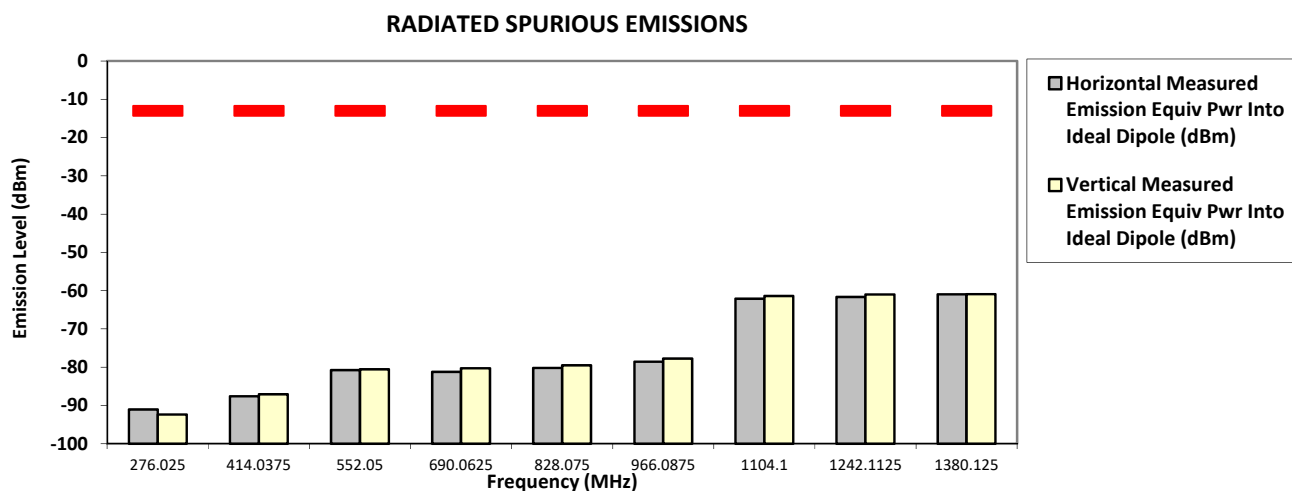


- 1) The Resolution Bandwidth for scanning Radiated Emission below 1 GHz is 100 kHz with Video Bandwidth = 300 kHz and Resolution Bandwidth for above 1 GHz is 1 MHz with Video Bandwidth = 3 MHz. Detector mode is positive peak.
- 2) In the semi- anechoic chamber, setup as illustrated above the DUT placed on the 0.8m height (for $F_c < 1\text{GHz}$) or 1.5m height (for $F_c > 1\text{GHz}$) 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.

6.11.2. Test Result (Analog)

Model Number: AAM28JNN9RA1AN SAC Transmitter Radiated Emission: S/N: 511TWP5907 SR:22117-EMC-00001
Battery Part No: NA Accy Part No: RMN5127C-C1, 13921-HKN4192B-1
Test Mode: TX Analog
138.012500 MHz 25 kHz 30.000 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)
276.0250	-13.0000	-91.0469 **	-92.3688 **
414.0375	-13.0000	-87.6190 **	-87.0658 **
552.0500	-13.0000	-80.7867 **	-80.5854 **
690.0625	-13.0000	-81.2192 **	-80.2756 **
828.0750	-13.0000	-80.2183 **	-79.5103 **
966.0875	-13.0000	-78.5837 **	-77.7655 **
1104.1000	-13.0000	-62.1043 **	-61.3924 **
1242.1125	-13.0000	-61.6752 **	-60.9885 **
1380.1250	-13.0000	-60.9600 **	-60.9331 **



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 Tue, 22 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): 24.1 Hum(%RH): 69.8

System MU: 4.03 dB

Remarks:

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

Model Number: AAM28JNN9RA1AN
Battery Part No: NA

SAC Transmitter Radiated Emission:

S/N: 511TWP5907

SR:22117-EMC-00001

Accy Part No: RMN5127C-C1, 13921-HKN4192B-1

Test Mode: TX Analog

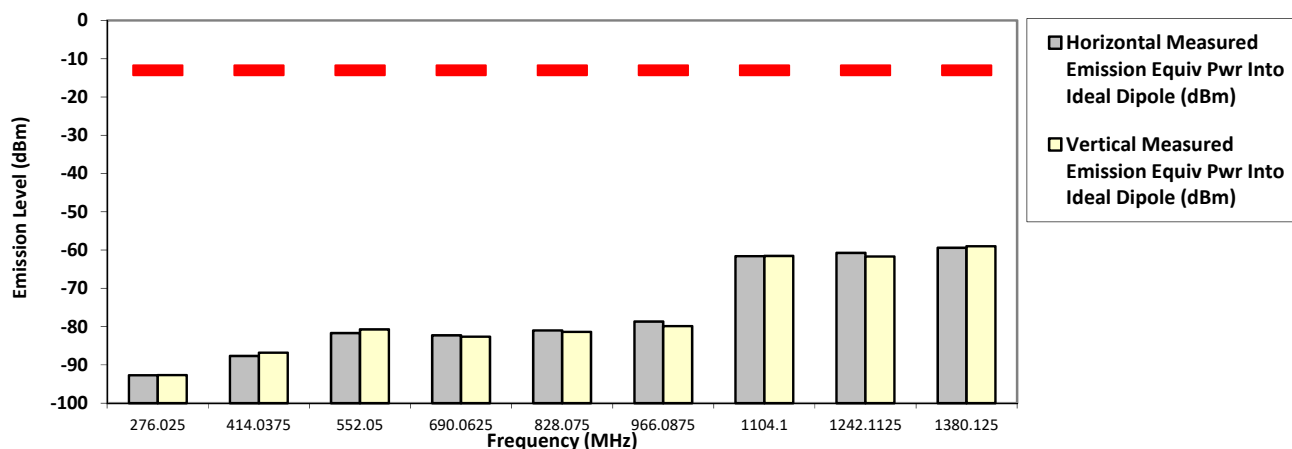
138.012500 MHz

25 kHz

1.000 Watt(s) /Low Power

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
276.0250	-13.0000	-92.7422 **	-92.6676 **
414.0375	-13.0000	-87.6856 **	-86.8225 **
552.0500	-13.0000	-81.6969 **	-80.7201 **
690.0625	-13.0000	-82.2931 **	-82.6478 **
828.0750	-13.0000	-81.0023 **	-81.3890 **
966.0875	-13.0000	-78.7059 **	-79.8578 **
1104.1000	-13.0000	-61.6128 **	-61.5173 **
1242.1125	-13.0000	-60.7479 **	-61.6830 **
1380.1250	-13.0000	-59.4029 **	-59.0026 **

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

Tue, 22 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): 24.1 Hum(%RH): 69.8

System MU: 4.03 dB

Remarks:

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

Model Number: AAM28JNN9RA1AN
Battery Part No: NA

SAC Transmitter Radiated Emission:

S/N: 511TWP5907

SR:22117-EMC-00001

Accy Part No: RMN5127C-C1, 13921-HKN4192B-1

Test Mode: TX Analog

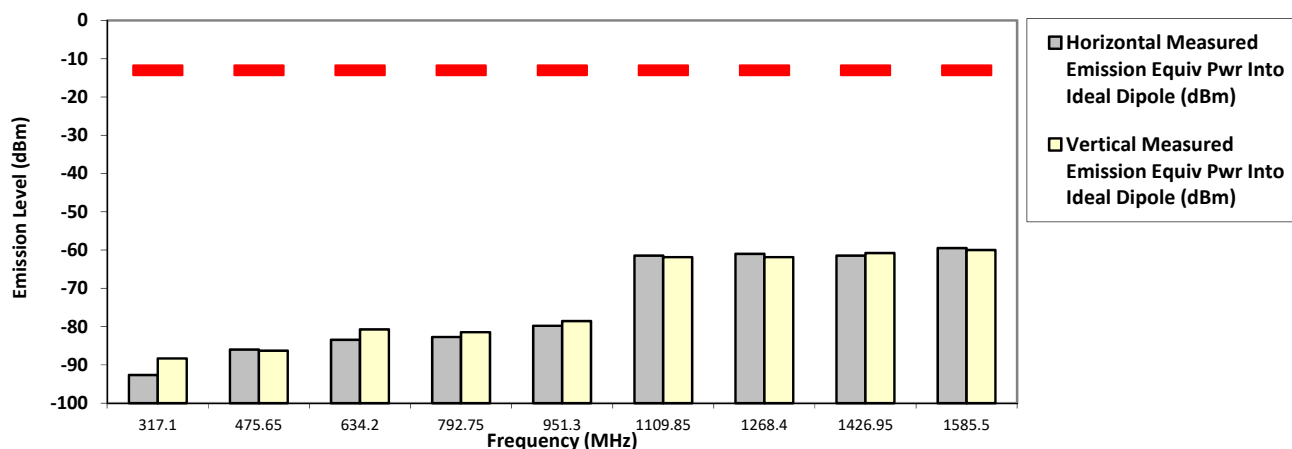
158.550000 MHz

25 kHz

30.000 Watt(s) /Max Power

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
317.1000	-13.0000	-92.6351 **	-88.3511 **
475.6500	-13.0000	-86.0128 **	-86.3141 **
634.2000	-13.0000	-83.4423 **	-80.7283 **
792.7500	-13.0000	-82.7230 **	-81.4593 **
951.3000	-13.0000	-79.7805 **	-78.5714 **
1109.8500	-13.0000	-61.4343 **	-61.8515 **
1268.4000	-13.0000	-61.0245 **	-61.8689 **
1426.9500	-13.0000	-61.4718 **	-60.7855 **
1585.5000	-13.0000	-59.4897 **	-59.9754 **

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

Tue, 22 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): 24.1 Hum(%RH): 69.8

System MU: 4.03 dB

Remarks:

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

Model Number: AAM28JNN9RA1AN
Battery Part No: NA

SAC Transmitter Radiated Emission:

S/N: 511TWP5907

SR:22117-EMC-00001

Accy Part No: RMN5127C-C1, 13921-HKN4192B-1

Test Mode: TX Analog

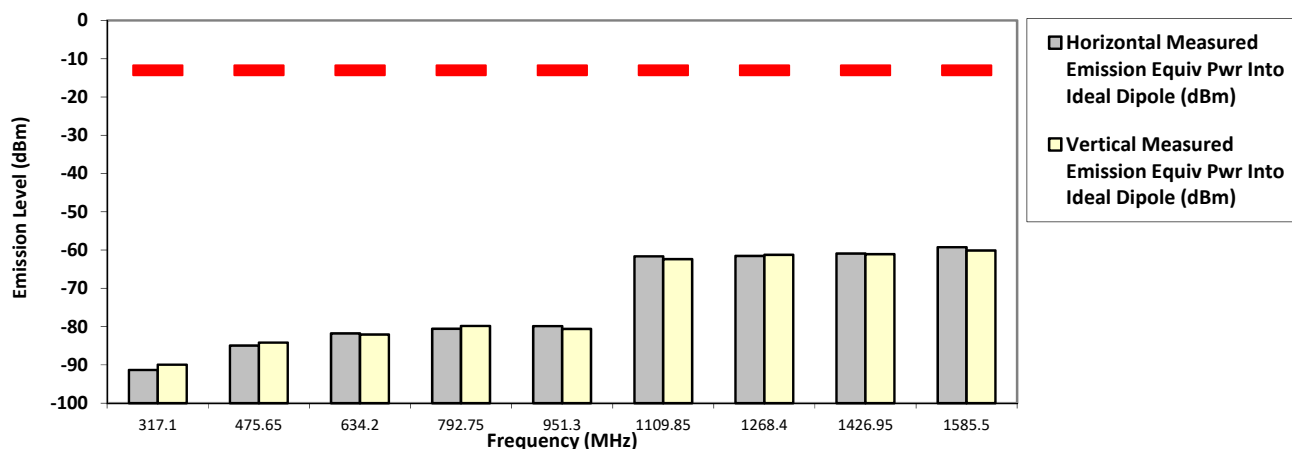
158.550000 MHz

25 kHz

1.000 Watt(s) /Low Power

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
317.1000	-13.0000	-91.3319 **	-89.9489 **
475.6500	-13.0000	-84.9606 **	-84.1751 **
634.2000	-13.0000	-81.7852 **	-82.0583 **
792.7500	-13.0000	-80.5676 **	-79.8436 **
951.3000	-13.0000	-79.8758 **	-80.6058 **
1109.8500	-13.0000	-61.6441 **	-62.3753 **
1268.4000	-13.0000	-61.5424 **	-61.2665 **
1426.9500	-13.0000	-60.9312 **	-61.0847 **
1585.5000	-13.0000	-59.2719 **	-60.1083 **

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
Tue, 22 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): 24.1 Hum(%RH): 69.8

System MU: 4.03 dB

Remarks:

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

Model Number: AAM28JNN9RA1AN
Battery Part No: NA

SAC Transmitter Radiated Emission:

S/N: 511TWP5907

SR:22117-EMC-00001

Accy Part No: RMN5127C-C1, 13921-HKN4192B-1

Test Mode: TX Analog

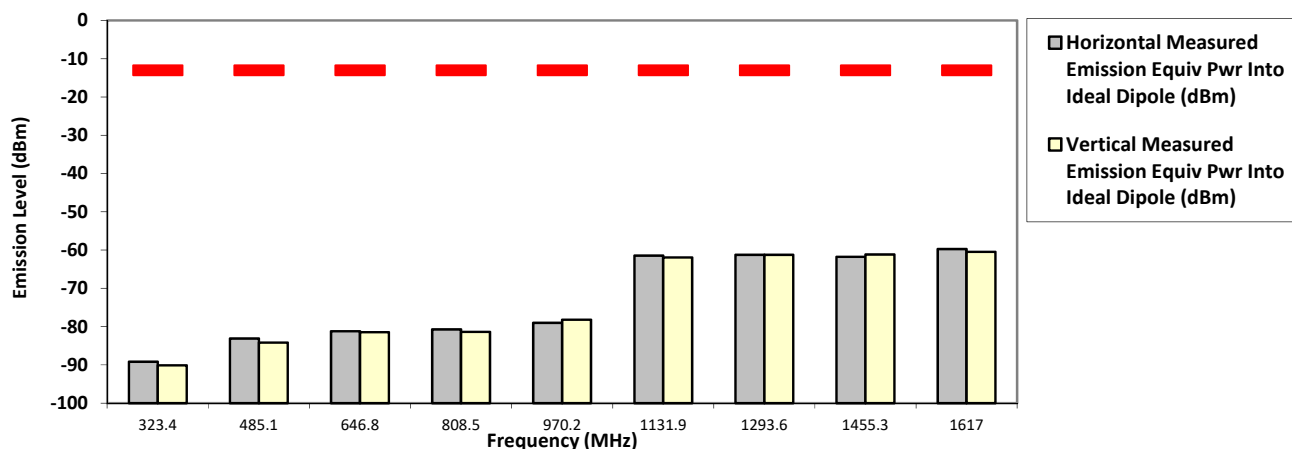
161.700000 MHz

25 kHz

30.000 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)
323.4000	-13.0000	-89.2064 **	-90.1143 **
485.1000	-13.0000	-83.1287 **	-84.2019 **
646.8000	-13.0000	-81.2318 **	-81.4523 **
808.5000	-13.0000	-80.7487 **	-81.3698 **
970.2000	-13.0000	-79.0262 **	-78.2062 **
1131.9000	-13.0000	-61.4595 **	-61.9563 **
1293.6000	-13.0000	-61.2569 **	-61.2588 **
1455.3000	-13.0000	-61.7619 **	-61.1553 **
1617.0000	-13.0000	-59.7603 **	-60.4634 **

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 Tue, 22 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): 24.1 Hum(%RH): 69.8

System MU: 4.03 dB

Remarks:

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

Model Number: AAM28JNN9RA1AN
Battery Part No: NA

SAC Transmitter Radiated Emission:

S/N: 511TWP5907

SR:22117-EMC-00001

Accy Part No: RMN5127C-C1, 13921-HKN4192B-1

Test Mode: TX Analog

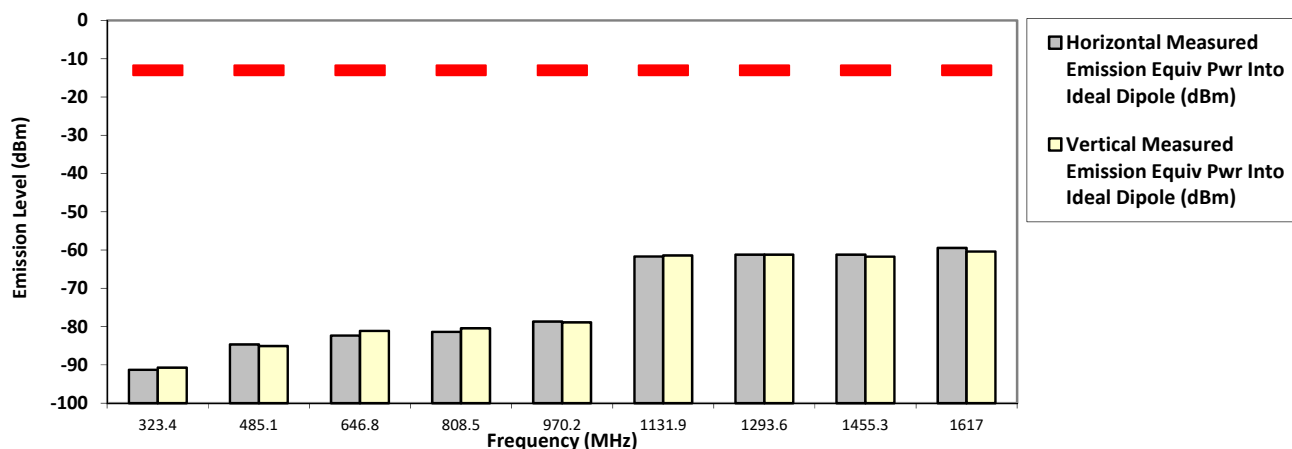
161.700000 MHz

25 kHz

1.000 Watt(s) /Low Power

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
323.4000	-13.0000	-91.3087 **	-90.7183 **
485.1000	-13.0000	-84.6620 **	-85.0906 **
646.8000	-13.0000	-82.3571 **	-81.1424 **
808.5000	-13.0000	-81.3952 **	-80.4422 **
970.2000	-13.0000	-78.7142 **	-78.9042 **
1131.9000	-13.0000	-61.7032 **	-61.4049 **
1293.6000	-13.0000	-61.2092 **	-61.2225 **
1455.3000	-13.0000	-61.1925 **	-61.7377 **
1617.0000	-13.0000	-59.4767 **	-60.3879 **

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 Tue, 22 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): 24.1 Hum(%RH): 69.8

System MU: 4.03 dB

Remarks:

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

Model Number: AAM28JNN9RA1AN
Battery Part No: NA

SAC Transmitter Radiated Emission:

S/N: 511TWP5907

SR:22117-EMC-00001

Accy Part No: RMN5127C-C1, 13921-HKN4192B-1

Test Mode: TX Analog

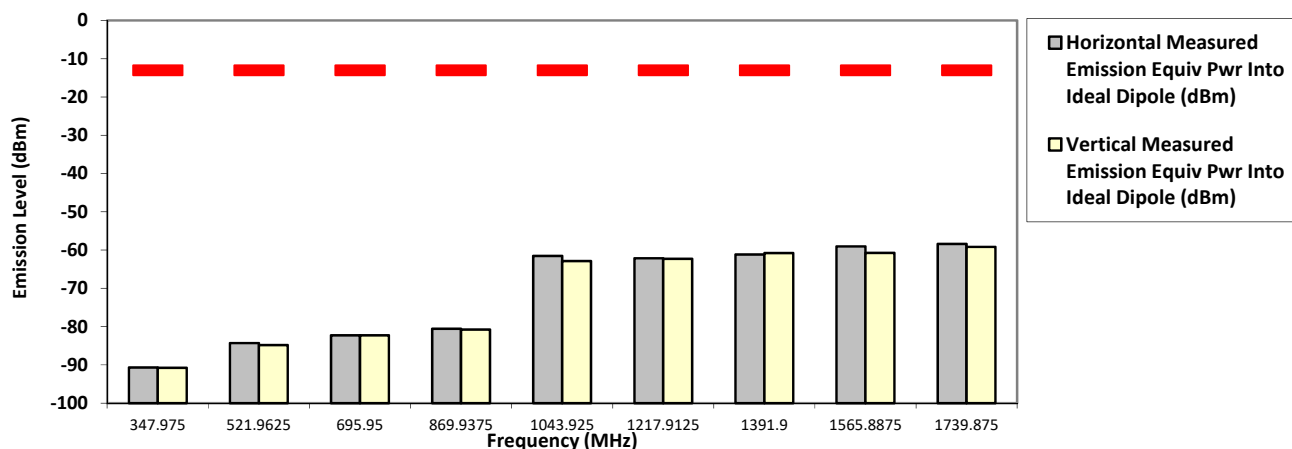
173.987500 MHz

25 kHz

30.000 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)
347.9750	-13.0000	-90.6940 **	-90.7678 **
521.9625	-13.0000	-84.2927 **	-84.8184 **
695.9500	-13.0000	-82.2949 **	-82.2927 **
869.9375	-13.0000	-80.5872 **	-80.7571 **
1043.9250	-13.0000	-61.5136 **	-62.8942 **
1217.9125	-13.0000	-62.1420 **	-62.3143 **
1391.9000	-13.0000	-61.1790 **	-60.8108 **
1565.8875	-13.0000	-59.0501 **	-60.7510 **
1739.8750	-13.0000	-58.4034 **	-59.1731 **

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 Tue, 22 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): 24.1 Hum(%RH): 69.8

System MU: 4.03 dB

Remarks:

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

Model Number: AAM28JNN9RA1AN
Battery Part No: NA

SAC Transmitter Radiated Emission:

S/N: 511TWP5907

SR:22117-EMC-00001

Accy Part No: RMN5127C-C1, 13921-HKN4192B-1

Test Mode: TX Analog

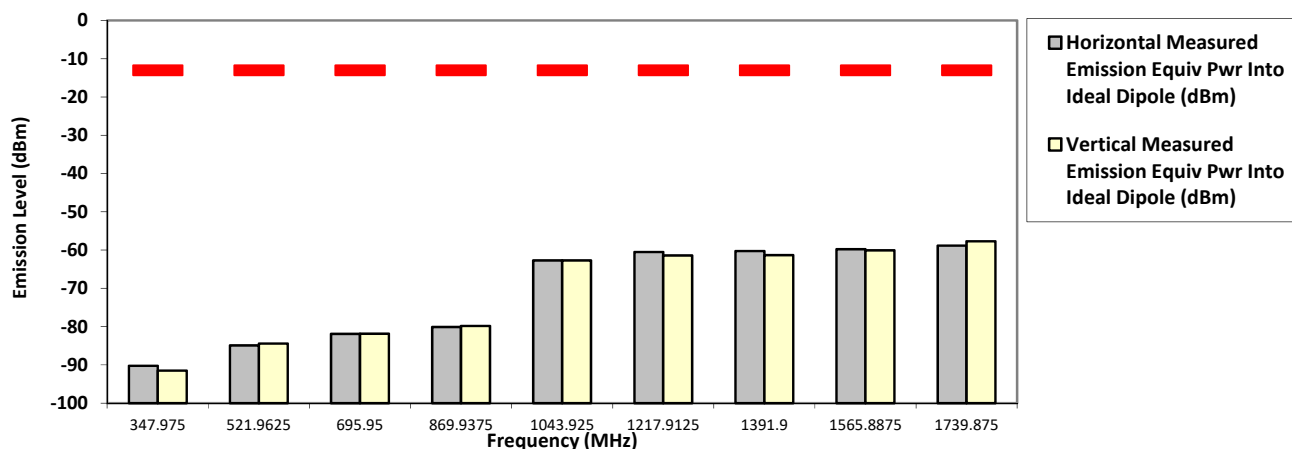
173.987500 MHz

25 kHz

1.000 Watt(s) /Low Power

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
347.9750	-13.0000	-90.2471 **	-91.5091 **
521.9625	-13.0000	-84.9342 **	-84.4220 **
695.9500	-13.0000	-81.8890 **	-81.8547 **
869.9375	-13.0000	-80.1252 **	-79.8447 **
1043.9250	-13.0000	-62.7289 **	-62.6953 **
1217.9125	-13.0000	-60.5108 **	-61.4056 **
1391.9000	-13.0000	-60.2756 **	-61.3341 **
1565.8875	-13.0000	-59.7940 **	-60.0576 **
1739.8750	-13.0000	-58.8371 **	-57.7122 **

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 Tue, 22 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): 24.1 Hum(%RH): 69.8

System MU: 4.03 dB

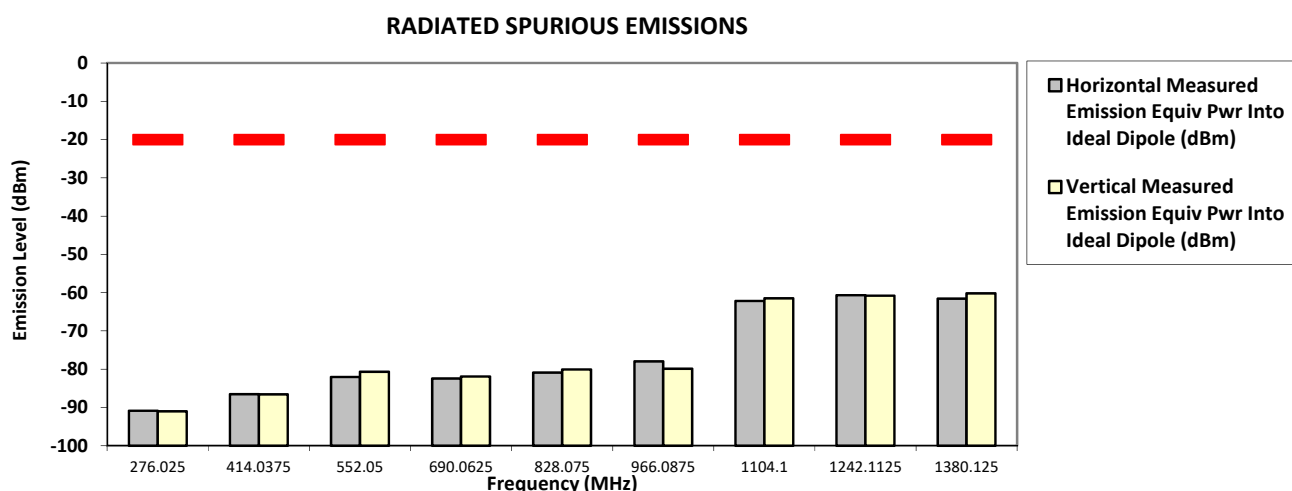
Remarks:

Passed Results	Marginal Results	Failed Results
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6.11.3. Test Result (Digital)

Model Number: AAM28JNN9RA1AN SAC Transmitter Radiated Emission: S/N: 511TWP5907 SR:22117-EMC-00001
Battery Part No: NA Accy Part No: RMN5127C-C1, 13921-HKN4192B-1
Test Mode: TX Digital
138.012500 MHz 12.5 kHz 30.000 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)
276.0250	-20.0000	-90.8435 **	-91.0346 **
414.0375	-20.0000	-86.5353 **	-86.5755 **
552.0500	-20.0000	-82.0470 **	-80.6870 **
690.0625	-20.0000	-82.4576 **	-81.9098 **
828.0750	-20.0000	-80.8890 **	-80.0922 **
966.0875	-20.0000	-77.9656 **	-79.8627 **
1104.1000	-20.0000	-62.1781 **	-61.5087 **
1242.1125	-20.0000	-60.6703 **	-60.8176 **
1380.1250	-20.0000	-61.5938 **	-60.1753 **



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 Tue, 22 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): 24.1 Hum(%RH): 69.8

System MU: 4.03 dB

Remarks:

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

Model Number: AAM28JNN9RA1AN
Battery Part No: NA

SAC Transmitter Radiated Emission:

S/N: 511TWP5907

SR:22117-EMC-00001

Accy Part No: RMN5127C-C1, 13921-HKN4192B-1

Test Mode: TX Digital

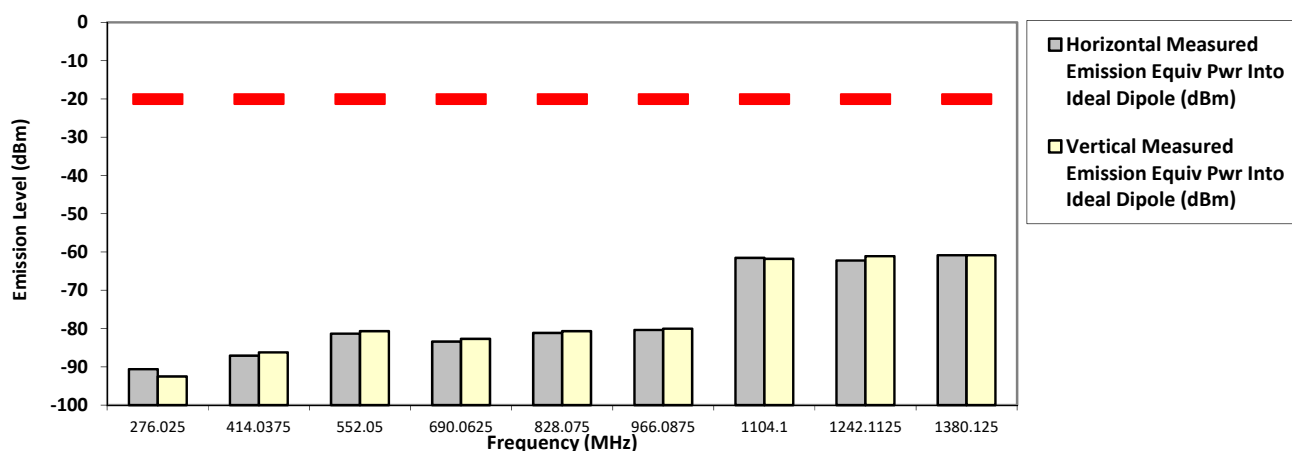
138.012500 MHz

12.5 kHz

1.000 Watt(s) /Low Power

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
276.0250	-20.0000	-90.6185 **	-92.5079 **
414.0375	-20.0000	-87.0690 **	-86.1999 **
552.0500	-20.0000	-81.3323 **	-80.6790 **
690.0625	-20.0000	-83.4124 **	-82.6861 **
828.0750	-20.0000	-81.1459 **	-80.7043 **
966.0875	-20.0000	-80.3570 **	-80.0380 **
1104.1000	-20.0000	-61.5441 **	-61.7942 **
1242.1125	-20.0000	-62.2158 **	-61.0962 **
1380.1250	-20.0000	-60.8391 **	-60.8238 **

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 Tue, 22 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): 24.1 Hum(%RH): 69.8

System MU: 4.03 dB

Remarks:

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

Model Number: AAM28JNN9RA1AN
Battery Part No: NA

SAC Transmitter Radiated Emission:

S/N: 511TWP5907

SR:22117-EMC-00001

Accy Part No: RMN5127C-C1, 13921-HKN4192B-1

Test Mode: TX Digital

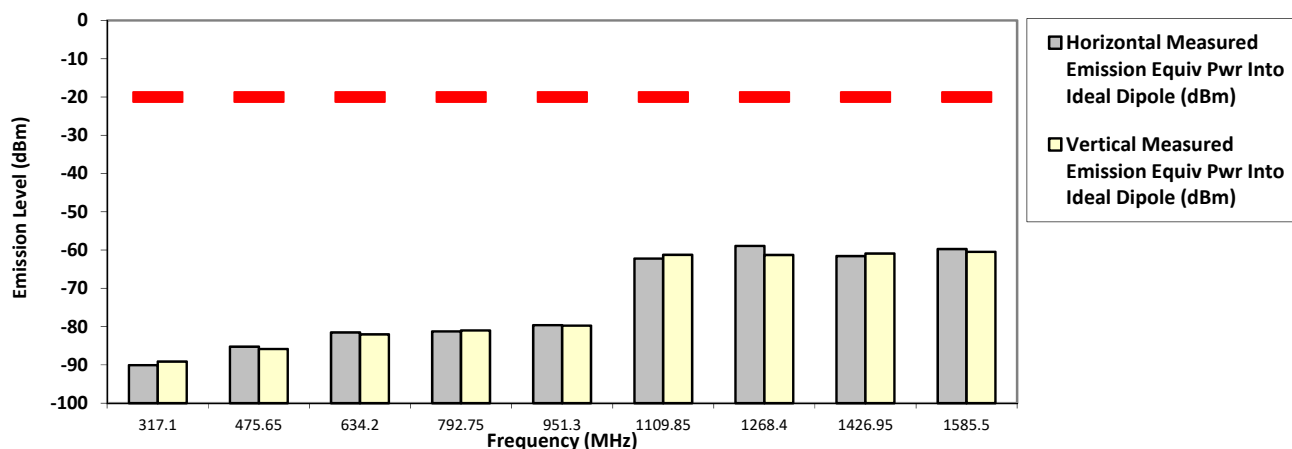
158.550000 MHz

12.5 kHz

30.000 Watt(s) /Max Power

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
317.1000	-20.0000	-90.0876 **	-89.1396 **
475.6500	-20.0000	-85.2423 **	-85.8618 **
634.2000	-20.0000	-81.5276 **	-82.0322 **
792.7500	-20.0000	-81.2714 **	-81.0152 **
951.3000	-20.0000	-79.6183 **	-79.7571 **
1109.8500	-20.0000	-62.2338 **	-61.2510 **
1268.4000	-20.0000	-58.9256 **	-61.2714 **
1426.9500	-20.0000	-61.5841 **	-60.9381 **
1585.5000	-20.0000	-59.7366 **	-60.4752 **

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 Tue, 22 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): 24.1 Hum(%RH): 69.8

System MU: 4.03 dB

Remarks:

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

Model Number: AAM28JNN9RA1AN
Battery Part No: NA

SAC Transmitter Radiated Emission:

S/N: 511TWP5907

SR:22117-EMC-00001

Accy Part No: RMN5127C-C1, 13921-HKN4192B-1

Test Mode: TX Digital

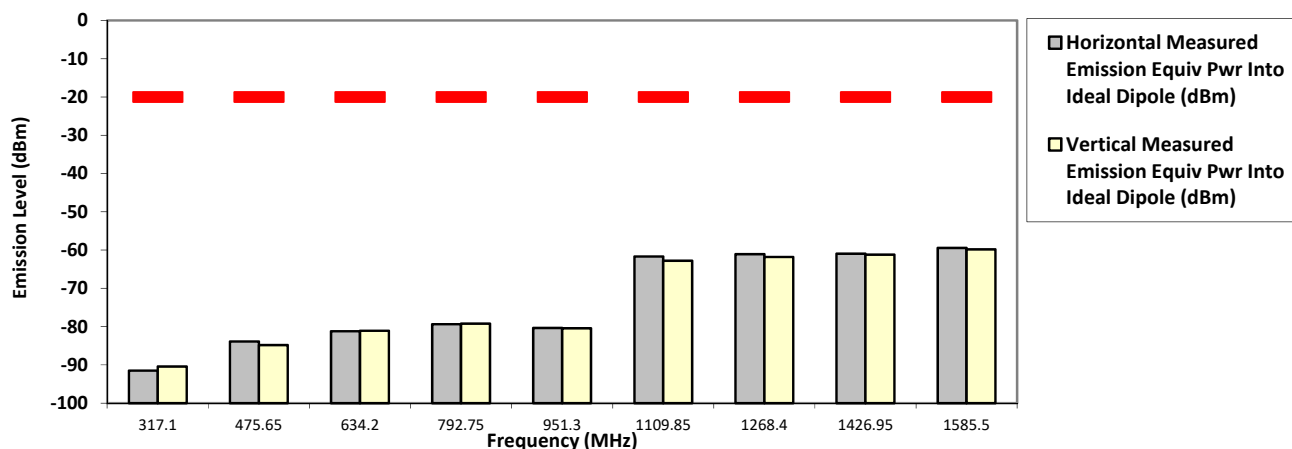
158.550000 MHz

12.5 kHz

1.000 Watt(s) /Low Power

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
317.1000	-20.0000	-91.5190 **	-90.4431 **
475.6500	-20.0000	-83.8945 **	-84.8194 **
634.2000	-20.0000	-81.2199 **	-81.0798 **
792.7500	-20.0000	-79.4073 **	-79.2288 **
951.3000	-20.0000	-80.3597 **	-80.4540 **
1109.8500	-20.0000	-61.6841 **	-62.8021 **
1268.4000	-20.0000	-61.0872 **	-61.8221 **
1426.9500	-20.0000	-60.9743 **	-61.1938 **
1585.5000	-20.0000	-59.4741 **	-59.8215 **

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 Tue, 22 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): 24.1 Hum(%RH): 69.8

System MU: 4.03 dB

Remarks:

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

Model Number: AAM28JNN9RA1AN
Battery Part No: NA

SAC Transmitter Radiated Emission:

S/N: 511TWP5907

SR:22117-EMC-00001

Accy Part No: RMN5127C-C1, 13921-HKN4192B-1

Test Mode: TX Digital

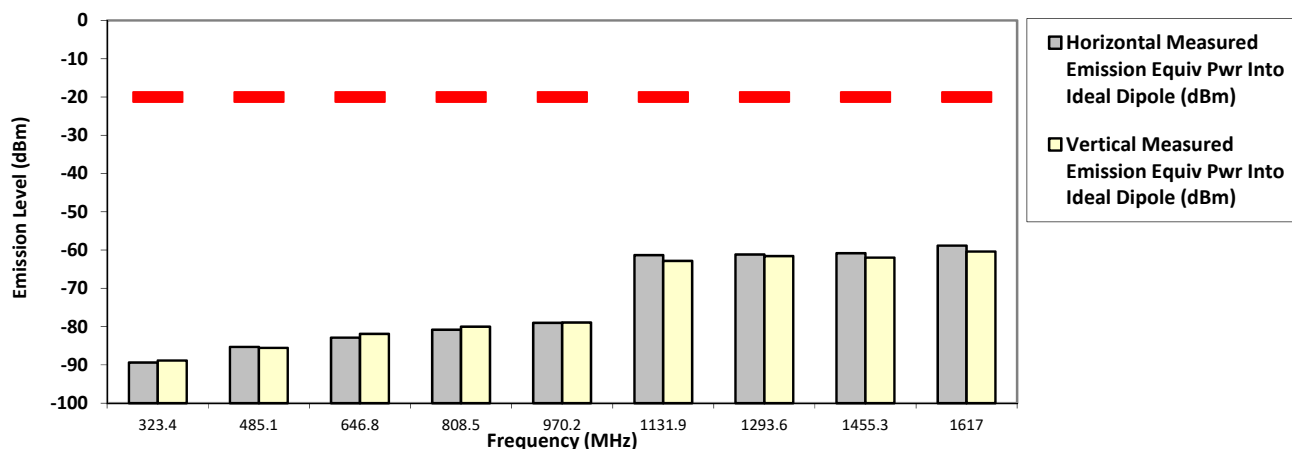
161.700000 MHz

12.5 kHz

30.000 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)
323.4000	-20.0000	-89.3768 **	-88.8627 **
485.1000	-20.0000	-85.3430 **	-85.5744 **
646.8000	-20.0000	-82.8852 **	-81.8908 **
808.5000	-20.0000	-80.8099 **	-80.0520 **
970.2000	-20.0000	-79.0041 **	-78.9228 **
1131.9000	-20.0000	-61.3362 **	-62.8374 **
1293.6000	-20.0000	-61.1856 **	-61.5622 **
1455.3000	-20.0000	-60.8446 **	-61.9740 **
1617.0000	-20.0000	-58.8607 **	-60.3955 **

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
Tue, 22 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): 24.1 Hum(%RH): 69.8

System MU: 4.03 dB

Remarks:

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

Model Number: AAM28JNN9RA1AN
Battery Part No: NA

SAC Transmitter Radiated Emission:

S/N: 511TWP5907

SR:22117-EMC-00001

Accy Part No: RMN5127C-C1, 13921-HKN4192B-1

Test Mode: TX Digital

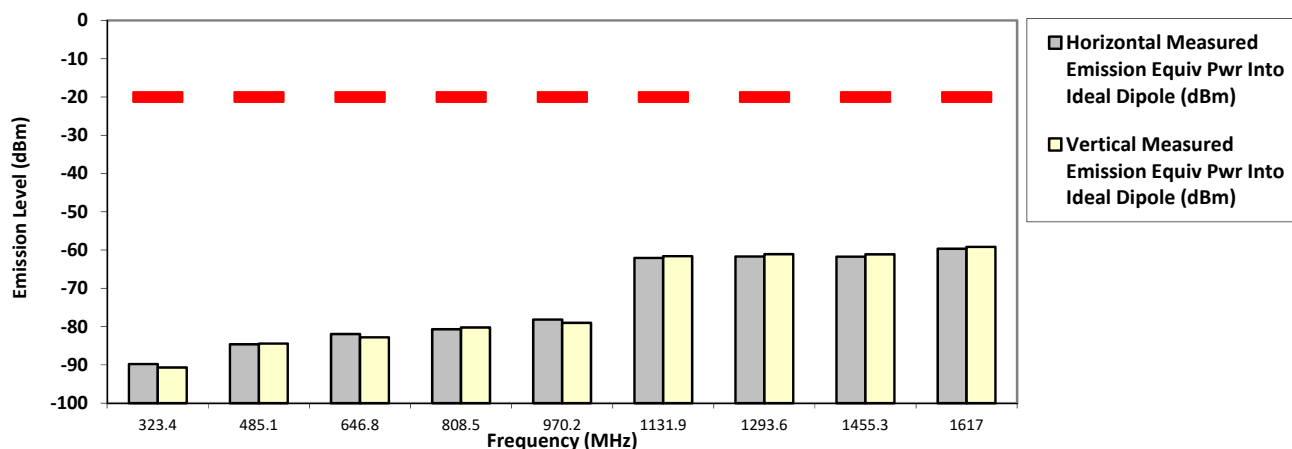
161.700000 MHz

12.5 kHz

1.000 Watt(s) /Low Power

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
323.4000	-20.0000	-89.7815 **	-90.6816 **
485.1000	-20.0000	-84.6231 **	-84.4134 **
646.8000	-20.0000	-81.9585 **	-82.7912 **
808.5000	-20.0000	-80.6703 **	-80.2561 **
970.2000	-20.0000	-78.1580 **	-79.0362 **
1131.9000	-20.0000	-62.0659 **	-61.5996 **
1293.6000	-20.0000	-61.7079 **	-61.0940 **
1455.3000	-20.0000	-61.7353 **	-61.1455 **
1617.0000	-20.0000	-59.6551 **	-59.1915 **

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
Tue, 22 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): 24.1 Hum(%RH): 69.8

System MU: 4.03 dB

Remarks:

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

Model Number: AAM28JNN9RA1AN
Battery Part No: NA

SAC Transmitter Radiated Emission:

S/N: 511TWP5907

SR:22117-EMC-00001

Accy Part No: RMN5127C-C1, 13921-HKN4192B-1

Test Mode: TX Digital

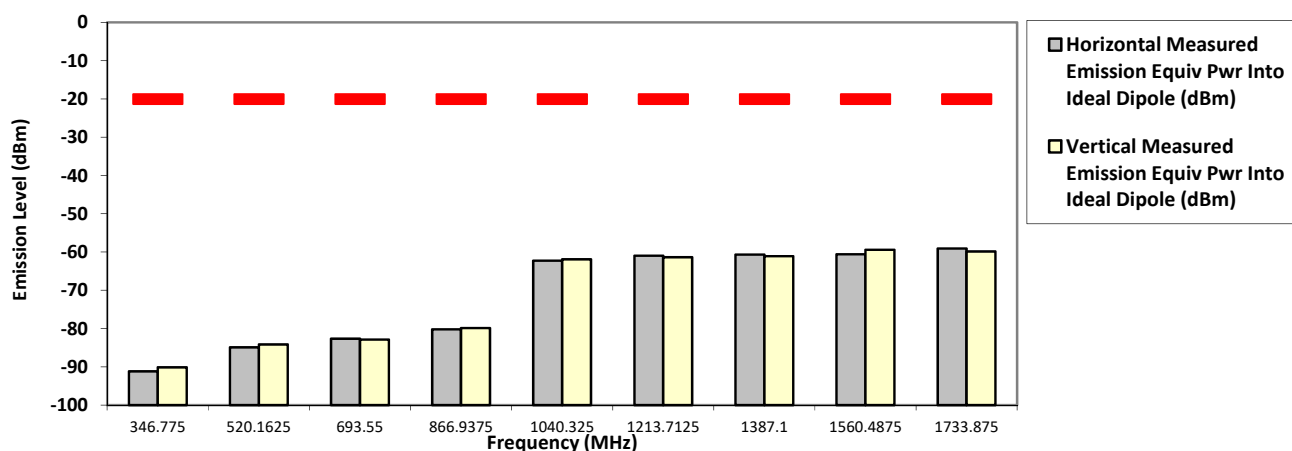
173.387500 MHz

12.5 kHz

30.000 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)
346.7750	-20.0000	-91.1938 **	-90.1223 **
520.1625	-20.0000	-84.9258 **	-84.1396 **
693.5500	-20.0000	-82.6583 **	-82.9027 **
866.9375	-20.0000	-80.2154 **	-79.8652 **
1040.3250	-20.0000	-62.2464 **	-61.8929 **
1213.7125	-20.0000	-60.9728 **	-61.3527 **
1387.1000	-20.0000	-60.6877 **	-61.0838 **
1560.4875	-20.0000	-60.5872 **	-59.4200 **
1733.8750	-20.0000	-59.1098 **	-59.8815 **

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 Tue, 22 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): 24.1 Hum(%RH): 69.8

System MU: 4.03 dB

Remarks:

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

Model Number: AAM28JNN9RA1AN
Battery Part No: NA

SAC Transmitter Radiated Emission:

S/N: 511TWP5907

SR:22117-EMC-00001

Accy Part No: RMN5127C-C1, 13921-HKN4192B-1

Test Mode: TX Digital

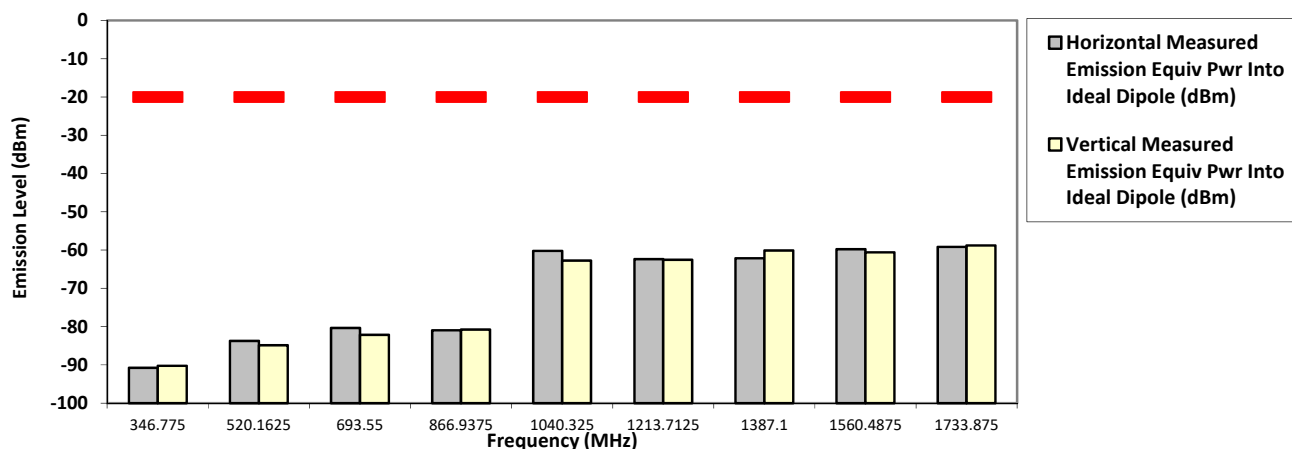
173.387500 MHz

12.5 kHz

1.000 Watt(s) /Low Power

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
346.7750	-20.0000	-90.7766 **	-90.2375 **
520.1625	-20.0000	-83.7364 **	-84.8677 **
693.5500	-20.0000	-80.3715 **	-82.1687 **
866.9375	-20.0000	-80.9589 **	-80.7544 **
1040.3250	-20.0000	-60.2467 **	-62.7391 **
1213.7125	-20.0000	-62.3749 **	-62.5409 **
1387.1000	-20.0000	-62.1596 **	-60.1066 **
1560.4875	-20.0000	-59.7886 **	-60.6161 **
1733.8750	-20.0000	-59.1708 **	-58.7973 **

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 Tue, 22 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): 24.1 Hum(%RH): 69.8

System MU: 4.03 dB

Remarks:

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

6.11.4. Test Limit

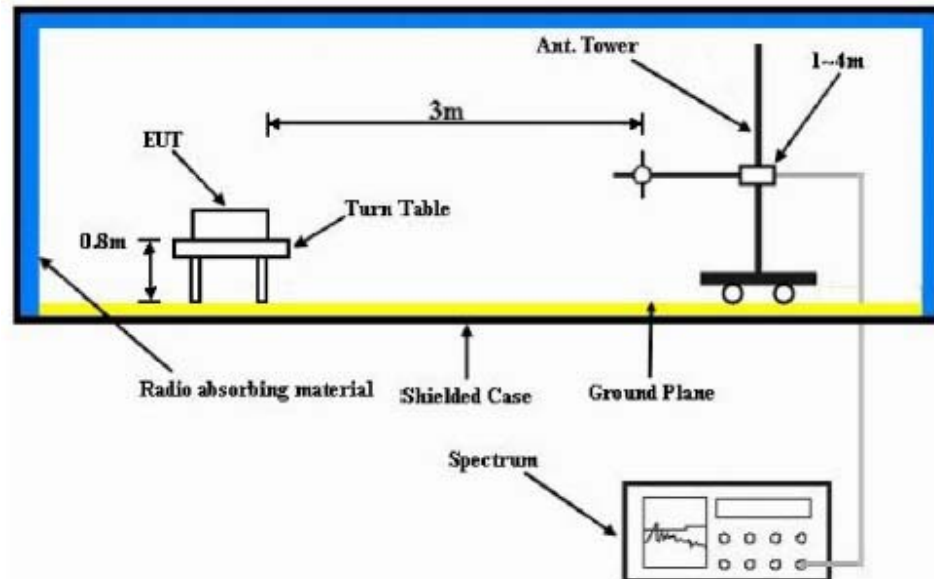
Table below summarized the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least

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)

6.12. Effective Radiated Power (ERP)

6.12.1. Test Setup



- 1) The Resolution Bandwidth for Equivalent Radiated Power (ERP) 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 (for $F_c < 1\text{GHz}$) or 1.5m (for $F_c > 1\text{GHz}$) 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.

6.12.2. Test Result

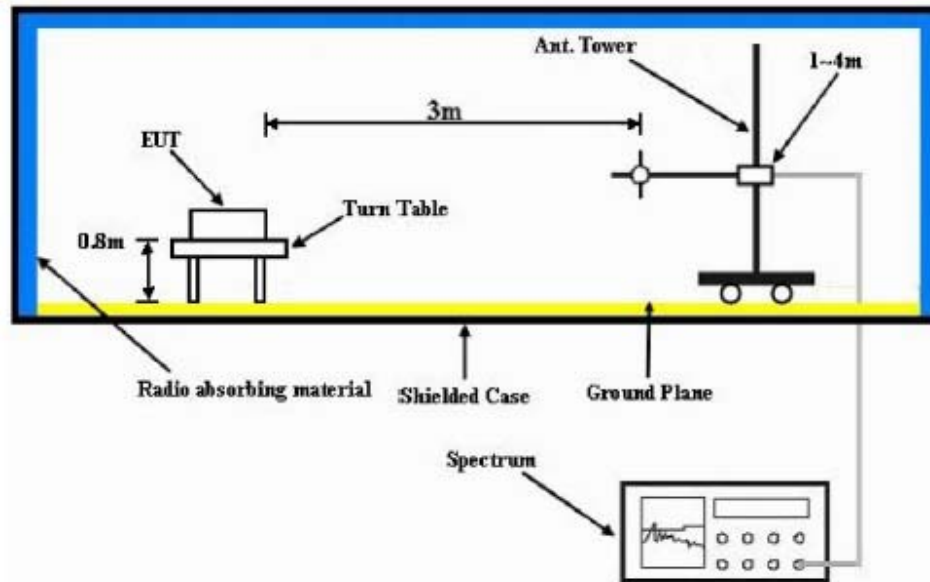
Not Applicable

6.12.3. Test Limit

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

6.13. GNSS (EIRP for 1559 - 1610MHz)

6.13.1. Test Setup



- 4) 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.
- 5) 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.
- 6) 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.
- 7) $EIRP = \text{“Read Value”} + \text{Measured substitution value} + 2.15$.

6.13.1. Test Result

Not Applicable

6.13.2. Test Limit

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.

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~ End of Test Report ~